#### Gravestone Condition Assessment 2019



Russellville Cemetery Hadley, MA

Report prepared by: Ta Mara Conde Historic Gravestone Services New Salem, MA

Hadley Cemetery Committee Alan Weinberg Digitized by the Internet Archive in 2024 with funding from Boston Public Library

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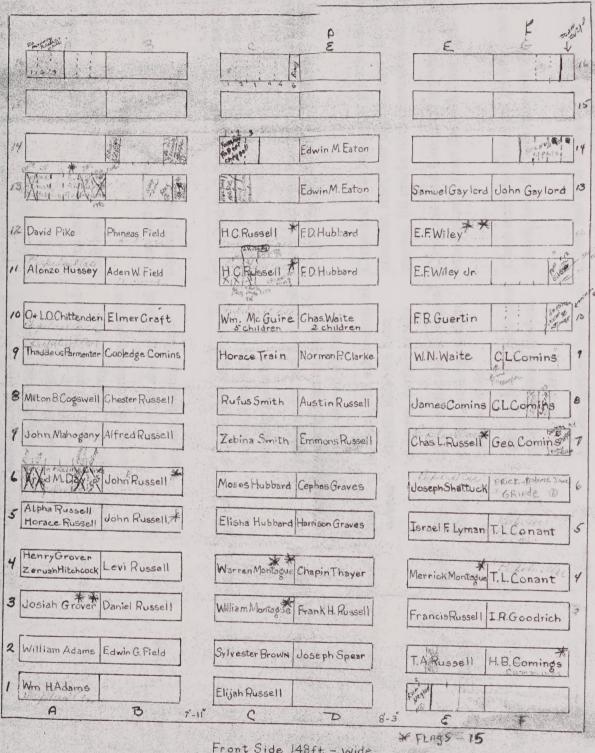
GHOHA .	TOT #	LAST	FIRST	STONE	TYTPE	CONDITION	TREATMENT
-	8A	Cogswell	Milton	marble	die w/base	ambient dirt and biological growth, fallen, leaning, concrete, sunken	Clean and treat biological growth, remove concrete, reset foundation stone plumb, reset die with lime mortar
-	9B	Comins	Julia	marble	tablet w/base	ambient dirt and biological growth, fallen	Clean and treat biological growth, locate base or create concrete base, reset plumb in base with lime mortar
-	9B	Comins	Sarah	marble	tablet w/base	ambient dirt and biological growth, out of base, leaning	Clean and treat biological growth, reset base plumb, reset in base with lime mortar
-	14D	Eaton	Tryphena	marble	die w/base	ambient dirt and biological growth, fallen, missing mortar	Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar
-	2B	Field	Mary Lucy	marble	tablet	ambient dirt and biological growth, leaning, broken	Clean and treat biological growth, locate fragment, create concrete base, reset plumb in base with lime mortar, reattach fragment
-	1118	Field	Phineas	granite	obelisk	ambient dirt and biological growth, leaning, concrete	Clean and treat biological growth, locate fragment, create concrete base, reset plumb in base with lime mortar, reattach fragment
-	SD	Graves	Emery	marble	die w/base	ambient dirt and biological growth, leaning, broken base, concrete	Clean and treat biological growth, remove concrete, reattach base fragments, reset in base with lime mortar
-	3A	Grover	Josiah	marble	tablet w/base	ambient dirt and biological growth, sunken, leaning	Clean and treat biological growth, reset plumb at correct height



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Russellville
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Clean and treat biological growth Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset base plumb at correct height, reset die with lime mortar	Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar	Clean and treat biological growth, remove pins, reset foundation stone plumb, reset die with lime mortar	Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar	Clean and treat biological growth, remove steel straps, reattach fragments, reset plumb at correct height	Clean and treat biological growth, remove concrete, reset base plumb, reset tablet with lime mortar	Clean and treat biological growth, reset plumb, repoint with lime mortar
ambient dirt and biological growth, leaning	ambient dirt and biological growth, leaning, sunken	ambient dirt and biological growth, leaning, missing mortar	ambient dirt and biological growth, leaning, loose on base, pins, missing mortar	ambient dirt and biological growth, leaning, loose on base, pins, missing mortar	ambient dirt and biological growth, leaning, sunken	ambient dirt and biological growth, leaning, sunken, broken at grade, steel straps	ambient dirt and biological growth, fallen, concrete, broken base	ambient dirt and biological growth, leaning, sunken
tablet	tablet w/base	die w/base	die w/base	die w/base	tablet w/base	tablet w/base	tablet w/base	tablet w/base
marble	marble	marble	marble	marble	marble	marble	marble	marble
Wm.	William	Merrick	Thaddeus	Lovina	Silias	John	Horace	Martha J.
Montague	Montague	Montague	Parmenter	Parmenter Lovina	Pike	Russell	Russell	Russell
3C	3C	4E	9A	9A	11A	5B	5B	5B
-1	-	-	-	-	-	-	-	-





Front Side 148ft - wide Size of Lot - 20x9ft.

Russellville Cemetery

North Hadley-Mass.

SAUF LOT & 3' LIGH

North Side - 182ft-Gin-Wide

Cemetery	Company
Russellville	7

Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, remove pins, reset base plumb, reset die with lime mortar	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height, fill missing material with restoration mortar	Clean and treat biological growth, reset base plumb, reset die with lime mortar	Clean and treat biological growth, remove concrete, reset base plumb, reset die with lime mortar, fill cracks with restoration mortar	Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar	Clean and treat biological growth, reset base plumb, reset die with lime mortar	Clean and treat biological growth, remove rubble, reset foundation stone plumb, reset elements with setting compound
ambient dirt and biological growth, leaning, tilted, mower damage	ambient dirt and biological growth, leaning, sunken, loose, pins, missing mortar	ambient dirt and biological growth, leaning, tilted	ambient dirt and biological growth, leaning, tilted, missing material	ambient dirt and biological growth, leaning, sunken, tilted, moved off base	ambient dirt and biological growth, loose on base, concrete, surface cracks	ambient dirt and biological growth, leaning, sunken, loose on base	ambient dirt and biological growth, leaning, sunken, loose on base	ambient dirt and biological growth, leaning, missing lead
tablet	die w/base	tablet	tablet	die w/base	die w/base	die w/base	die w/base	die w/base
marble	marble	marble		marble	marble	marble	marble	granite
Lovina	Alpha	Joanna	Lucia Maria marble	Cordelia M. marble	Myra L.	Adelle	Hazel	Charles
Russell	Russell	Russell	Russell	Russell	Russell	Russell	Russell	Russell
5B	5A	8B	8B	TD	d7	3E	3E	7E
-	-	-	-	-	-	-	-	-



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Clean and treat biological growth, remove rubble, reset base plumb, reset elements with setting compound	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset base plumb, reset die with lime mortar	Clean and treat biological growth, reattach plinth fragments, reset base plumb, reset die with lime mortar	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, remove concrete, reset plumb, repoint with lime mortar	Clean and treat biological growth, remove concrete, reset plumb, repoint with lime mortar	Clean and treat biological growth, reset plumb at correct height
ambient dirt and biological growth, leaning, missing mortar, set on rubble	ambient dirt and biological growth, leaning, sunken, mower damage	ambient dirt and biological growth, leaning, sunken, mower damage	ambient dirt and biological growth, leaning, loose on base	ambient dirt and biological growth, leaning, loose on base, broken plinth	ambient dirt and biological growth, leaning, concrete	ambient dirt and biological growth, leaning, sunken, concrete	ambient dirt and biological growth, leaning, concrete	ambient dirt and biological growth, leaning, tilted
obelisk	tablet	tablet	die w/base	die w/base	tablet	tablet w/base	tablet w/base	footstone
granite	marble	marble	marble	marble	marble	marble	marble	marble
Horrace	children of Chas.	children of Chas. #2	Ebenezer	Adeline	elso	Phebe S.	N. Maria Spear	S. F.
Train	Waite	Waite	Wiley	Wiley	Wiley	Brown	Brown	C.
26	10D	10D	12E	12E	12E	2C	2C	10B
-	_		-	-	-	2	2	2



Cemetery	
Russellville	

Clean and treat biological growth, reset foundation stone plumb, reattach plinth fragments with restoration mortar, reset die with lime mortar	Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar	Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar, fill cracks with restoration mortar	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reattach base fragments, reset base plumb, reset die with lime mortar
ambient dirt and biological growth, leaning, tilted, missing mortar, plinth	ambient dirt and biological growth, leaning	ambient dirt and biological growth, leaning	ambient dirt and biological growth, leaning, sunken	ambient dirt and biological growth, leaning, surface cracks, missing material,	ambient dirt and biological growth, leaning, tilted	ambient dirt and biological growth, leaning, sunken	ambient dirt and biological growth, tilted, sunken	ambient dirt and biological growth, leaning, sunken, broken base
die w/base	die w/base	die w/base	tablet w/base	die w/base	tablet	tablet w/base	tablet w/base	die w/base
marble	marble	marble	marble	marble	marble	marble	marble	marble
Jane	Edwin M.	Julia E.	Clara	Samuel and Emily Field	H. J.	Susan L.	Elisah	Martha
Cogswell Jane	Eaton	Eaton	Field	Gaylord	Ö	Graves	Hubbard	Hubbard
8A	14D	14D	2B	13E	4A	5D	5C	29
7	7	7	2	2	2	2	7	2



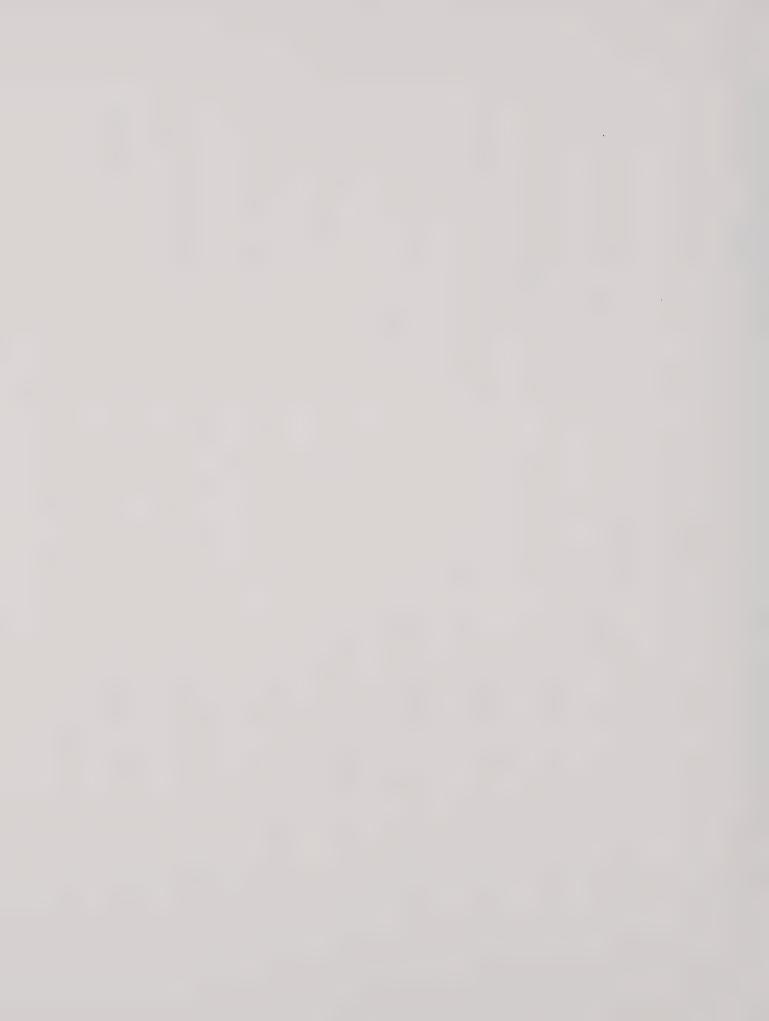
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Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar	Clean and treat biological growth, reset base plumb, reset tablet with lime mortar	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height, repoint with lime mortar	Clean and treat biological growth, reset plumb at correct height, repoint with lime mortar	Clean and treat biological growth, consolidate material, reset plumb at correct height, fill cracks with restoration mortar	Clean and treat biological growth, remove rubble, reset foundation stone plumb, reset elements with setting compound	Clean and treat biological growth, reset plumb at correct height, fill missing material with restoration mortar
ambient dirt and biological growth, leaning, sunken, tilted	ambient dirt and biological growth, loose, leaning, sunken	ambient dirt and biological growth, leaning, tilted	ambient dirt and biological growth, leaning	ambient dirt and biological growth, leaning, sunken	ambient dirt and biological growth, leaning, concrete	ambient dirt and biological growth, leaning, spalling	ambient dirt and biological growth, leaning, set on rubble	ambient dirt and biologial growth, loose on base
die w/base	tablet w/base	tablet	tablet	tablet w/base	tablet w/base	tablet	obelisk	die w/base
marble	marble	marble	marble	marble	marble	marble	granite	marble
Ora Russell marble	Benjamin	Arthur	Persis #2	Brainard and Arthur	Jane	Dema	Calvin 1883 granite	Lucy
Kendall	Mack	Montague	Montague Persis #2	Montague	Montague	Parker	Russell	Russell
3E	29	4C	4C	4C	4C	5A	38	3B
7	2	2	2	2	2	2	2	2



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Clean and treat biological growth, reset base plumb, reset die with lime mortar	Clean and treat biological growth, reset base plumb, reset die with lime mortar	ambient dirt and biologiacal Clean and treat biological growth, reset base growth, sunken, loose plumb, reset die with lime mortar	Clean and treat biological growth, reset base plumb, reset die with lime mortar	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, consolidate material, reset plumb at correct height, fill cracks with restoration	Clean and treat biological growth, reset base plumb, repoint tablet with lime mortar
ambient dirt and biological growth, leaning, sunken	ambient dirt and biological growth, leaning, sunken	ambient dirt and biologiacal growth, sunken, loose	ambient dirt and biological growth, sunken, loose	ambient dirt and bioilogical growth, tilted, sunken, mower damage	ambient dirt and biological growth, tilted, sunken	ambient dirt and biological growth, tilted, sunken	ambient dirt and biological growth, tilted, sunken, spalling	ambient dirt and biological growth, leaning, sunken
die w/base	die w/base	die w/base	die w/base	tablet w/base	tablet	tablet w/base	tablet w/base	tablet w/base
marble	marble	marble	marble	marble	marble	marble	marble	marble
Daniel	Sally	Harriett	Calvin	Levi	Caroline	Miram	Ellen M.	Martha
Russell	Russell	Russell	Russell	Russell	Russell	Russell	Russell	Russell
38	38	3B	38	4B	4B	5B	5A	5A
7	2	2	2	7	7	2	2	2



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Clean and treat biological growth, reset base plumb, repoint tablet with lime mortar	Clean and treat biological growth, remove rubble, reset base plumb, reset die with lime mortar	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height, fill cracks with restoration mortar	Clean and treat biological growth, reset base plumb, reset die with lime mortar	Clean and treat biological growth, remove concrete, reset foundation stone plumb, reset die with lime mortar	Clean and treat biological growth, reset foundation stone plumb, reset elements with lime mortar, fill cracks	Clean and treat biological growth, reset plumb at correct height, fill cracks with restoration mortar
ambient dirt and biological growth, leaning, tilted, sunken	ambient dirt and biological growth, leaning, rubble	ambient dirt and biological growth, leaning	ambient dirt and biological growth, leaning, spalling	ambient dirt and biological growth, leaning, sunken, tilted, surface cracks	Ambient dirt and biological growth, sunken, loose on base	ambient dirt and biological growth, tilted, concrete	ambient dirt and biological growth, leaning, concrete, missing mortar, surface	ambient dirt and biological growth, leaning, tilted, sunken, surface cracks
tablet w/base	die w/base	tablet	tablet	tablet w/base	die w/base	die w/base	obelisk	tablet
marble	marble	marble	marble	marble	marble	marble	marble	marble
Jane	John #2	Emily	Sarah M.	Unknown	Ellen	Emmons		infant
Russell	Russell	Russell	Russell	Russell	Russell	Russell	Shattuck	Spear
5A	6B	6B	6B	7D	38	7D	9E	2D
2	2	2	2	2	7	2	2	2



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Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reattach base fragments, reset stone in base with lime mortar	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height, fill cracks with restoration mortar	Clean and treat biological growth, remove concrete, reset base plumb, reset die with lime mortar	Clean and treat biological growth, reset base plumb, reset die with lime mortar, fill cracks with restoration mortar	Clean and treat biological growth, reset plumb, repoint with lime mortar	Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar	Clean and treat biological growth, remove concrete, reset plumb, repoint with lime mortar
ambient dirt and biological growth, tilted, surface cracks, missing material	ambient dirt and biological growth, tilted, broken base	ambient dirt and biological growth, leaning, sunken	ambient dirt and biological growth, leaning, sunken	ambient dirt and biological growth, leaning, concrete	ambient dirt and biological Clean and treat biogrowth, loose on base, plumb, reset die w broken base, missing mortar restoration mortar	ambient dirt and biological growth, leaning, concrete	ambient dirt and biological growth, leaning, sunken	ambient dirt and biological growth, leaning, concrete
tablet	tablet w/base	tablet	tablet w/base	die w/base	die w/base	die w/base	die w/base	die w/base
marble	marble	granite	marble	marble	marble	marble	marble	marble
Medad #2	Emery		Emma				John F.	
Thayer	Brown	C. L. R.	Cogswell	Fannie M.	Father	Father	Gaylord	George H.
4D	2C	7E	8A	6E	78	9E	13F	9E
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Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar
ambient dirt and biological growth, sunken	footstone ambient dirt and biological growth, leaning, mower damage	ambient dirt and biological growth, leaning, tilted, mower damage	ambient dirt and biological growth, leaning	ambient dirt and biological growth, leaning, mower damage, reverse direction	ambient dirt and biological growth, leaning, sunken	ambient dirt and biological growth, tilted	ambient dirt and biological growth, leaning, sunken	ambient dirt and biological growth, leaning, sunken
tablet  w/base	footstone	footstone	tablet	footstone	tablet w/base	tablet w/base	tablet	die w/base
marble	marble	marble	marble	marble	marble	marble	marble	marble
Charles L.	I.E.	L.M.	Marcia	M.E.	John	Cordelia	Lucia	William
Grover	L.	W.	Lyman	L.	Mahogany John	Mahogany Cordelia	Mahogany Lucia	McGuire
3A	SE.	SE	5E	SE	7A	7A	7A	10C
κ	6	8	<i>c</i>	8	8	6	8	c



Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height, fill cracks	Clean and treat biological growth, reset base plumb, reset die with lime mortar	Clean and treat biological growth, reset base plumb, reset die with lime mortar	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset base plumb, reset die with lime mortar	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset base plumb, reset tablet with lime mortar
ambient dirt and biological growth, leaning, tilted, mower damage	ambient dirt and biological growth, delaminating	ambient dirt and biological growth, missing mortar, cracks in base	ambient dirt and biological growth, leaning, concrete	ambient dirt and biological growth, leaning	ambient dirt and biological growth, sunken	ambient dirt and biological growth, tilted	ambient dirt and biological growth, tilted	ambient dirt and biological growth, leaning, sunken
footstone	tablet	die w/base	die w/base	tablet	die w/base	tablet	tablet	tablet w/base
marble	marble	marble	marble	marble	marble	marble	marble	marble
si	Persis		#5	Esther	Dea. Daniel marble	Salome	Sarah	Flora
10C McGuire	Montague	Mother	Mother	Newman	Russell	Russell	Russell	Russell
10C	3C	7B	6E	4D	38	48	4B	5A
m	<b>6</b>	8	Ю.	8	<b>m</b>	8	m	8

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Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset base plumb, repoint tablet with lime mortar	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, remove concrete, reset base plumb, reset die with lime mortar	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset plumb at correct height	Clean and treat biological growth, reset base plumb, reset die with lime mortar	Clean and treat biological growth, reset base plumb, reset die with lime mortar
ambient dirt and biological growth, tilted	ambient dirt and biological growth, leaning, tilted	ambient dirt and biological growth, leaning, sunken	ambient dirt and biological growth, leaning, sunken	ambient dirt and biological growth, leaning, concrete	ambient dirt and biological growth, leaning	footstone ambient dirt and biological growth, leaning, location?	ambient dirt and biological growth, tilted, sunken	ambient dirt and biological growth, leaning, mower damage
tablet	tablet w/base	tablet w/base	tablet w/base	die w/base	tablet	footstone	die w/base	die w/base
marble	marble	marble	marble	marble	slate	marble	marble	marble
Christepher marble	Anna	Lucy P.	Harvey	Ü	Medad		Hamilton P. marble	Саттіе Е.
Russell	Russell	Russell	Russell	Russell	Thayer	Unknown #1	Whitney	Wiley
6B	8B	8B	8B	6E	4D	11A	7C	12E
m	m	8	6	8	W	8	8	8

ambient dirt and biological Clean and treat biological growth, reset base growth, leaning, tilted, plumb, reset die with lime mortar mower damage	ambient dirt and biological Clean and treat biological growth, reset base growth, broken base plumb, reset die with lime mortar, fill cracks with restoration mortar	ambient dirt and biological Clean and treat biological growth, reset plumb, remove concrete, repoint with lime mortar
ambient dirt and biological growth, leaning, tilted, mower damage	ambient dirt and biological growth, broken base	ambient dirt and biological growth, broken base
die w/base	die w/base	die w/base
marble	marble die	marble die
3 12E Wiley Dexter marble die w/l		
Wiley	7B Elvira	7B James
12E	7B	7B
8	m	m

# HISTORIC GRAVESTONE SERVICES \*Conservation Form\* TLC\* 2019

CemeteryRussellville CemeteryLocationHadley, MALot #2CNameBrown, EmeryDate of DeathApril 21, 1841MaterialmarbleMarker Typetablet w/basePriority3

Stone Condition

Ambient dirt and biological growth, tilted, broken base

Recommendations

Clean and treat biological growth, reattach base fragments, reset stone in base with lime mortar



# HISTORIC GRAVESTONE SERVICES \*Conservation Form\* TLC\* 2019

Russellville Cemetery Cemetery Location

Hadley, MA

Brown, N. Maria Spear Aug. 28, 1909 Date of Death

Name Lot#

tablet w/base marble Marker Type

Material

Priority

#### Stone Condition

Ambient dirt and biological growth, leaning, concrete

### Recommendations

remove concrete, reset plumb, repoint Clean and treat biological growth, with lime mortar



# HISTORIC GRAVESTONE SERVICES \*Conservation Form\* TLC\* 2019

Russellville Cemetery Hadley, MA Cemetery Location Lot#

Brown, Phebe S. March 13, 1845

Name

Date of Death

tablet w/base marble

Marker Type

Priority

Material

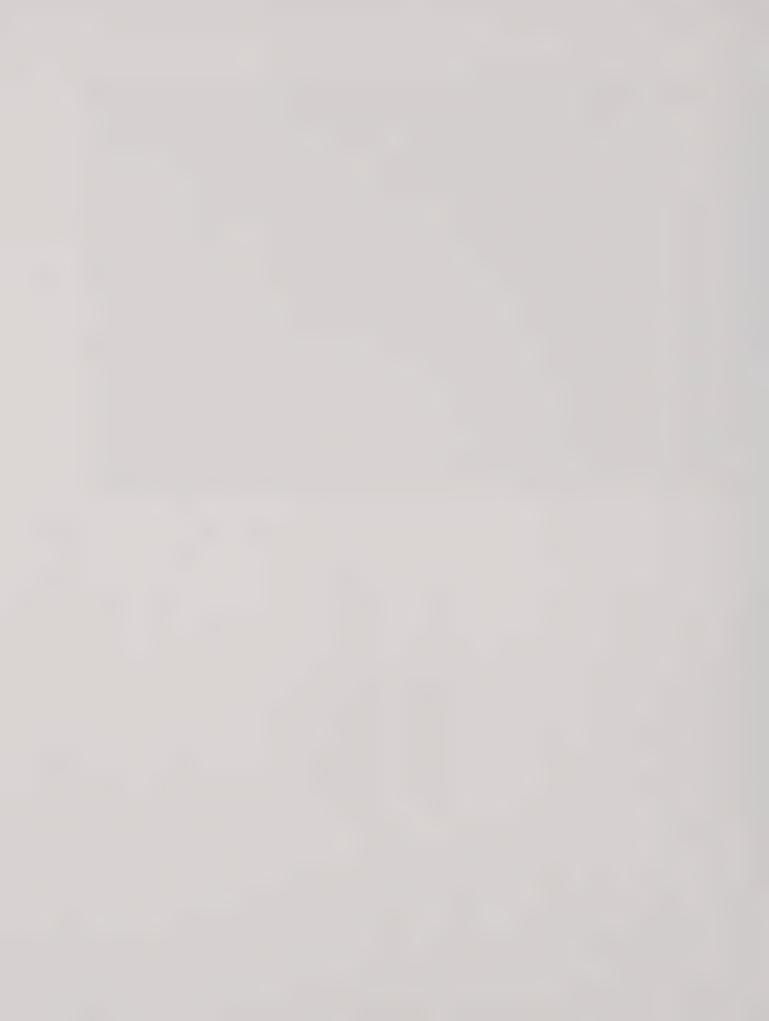
#### Stone Condition

Ambient dirt and biological growth, leaning, sunken, concrete

### Recommendations

remove concrete, reset plumb, repoint Clean and treat biological growth, with lime mortar





Russellville Cemetery Hadley, MA 7E Cemetery Location Lot#

C. L. R. Date of Death

Name

granite marker 3 Marker Type Material Priority

Stone Condition

Ambient dirt and biological growth, leaning, sunken

Recommendations

Clean and treat biological growth, reset plumb at correct height



Location Hadley, MA  Lot # 10B  Name C., S. F.  Material marble footstone
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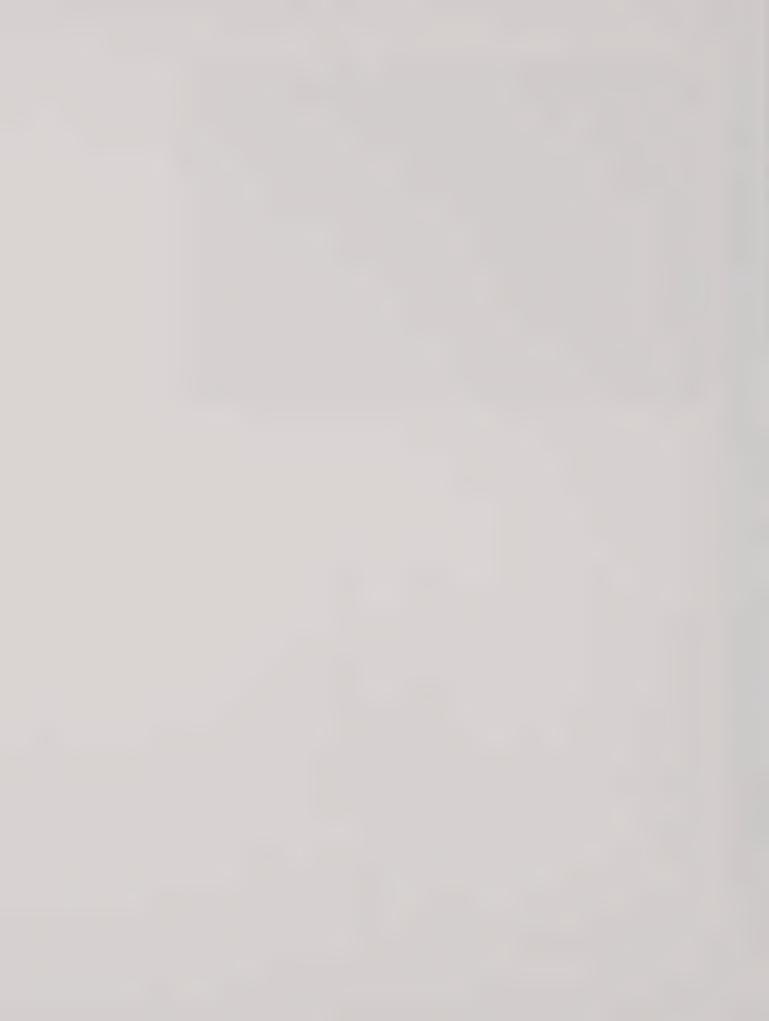
#### **Stone Condition**

Ambient dirt and biological growth, leaning, tilted

## Recommendations

Clean and treat biological growth, reset plumb at correct height





Russellville Cemetery Hadley, MA Cemetery Location

Cogswell, Emma Jan. 2, 1859 8A Date of Death Name Lot #

tablet w/base 3 marble Marker Type Material

Priority

#### Stone Condition

Ambient dirt and biological growth, leaning, sunken, surface cracks

## Recommendations

Clean and treat biological growth, reset plumb at correct height, fill cracks with restoration mortar



Russellville Cemetery Hadley, MA 8A Cemetery Location

Lot #

Cogswell, Jane April 6, 1883 Date of Death Name

marble die w/base Marker Type Material

Priority

#### Stone Condition

leaning, tilted, missing mortar, plinth Ambient dirt and biological growth,

broken

### Recommendations

foundation stone plumb, reattach plinth fragments with restoration mortar, reset Clean and treat biological growth, reset die with lime mortar



Russellville Cemetery Hadley, MA 8A Cemetery Location

Cogswell, Milton May 10, 1892 Date of Death Name Lot #

marble die w/base Material

Marker Type Priority

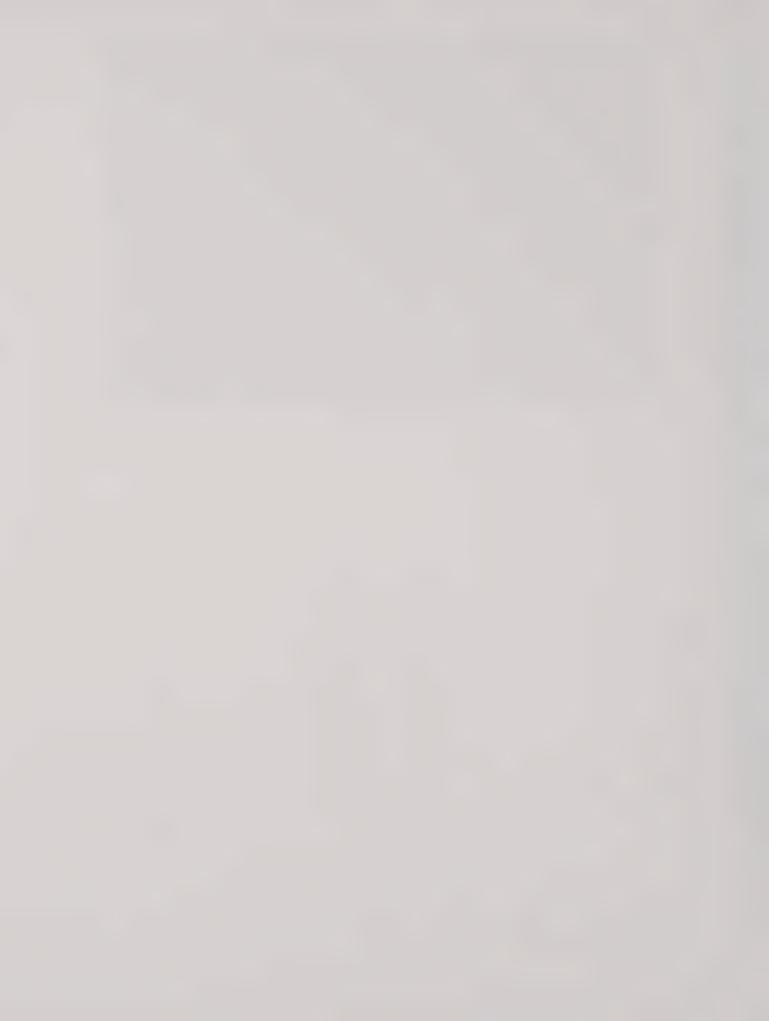
**Stone Condition** 

Ambient dirt and biological growth, leaning, sunken, fallen, concrete

Recommendations

remove concrete, reset foundation stone Clean and treat biological growth, plumb, reset die with lime mortar





\*Conservation Form\* TLC\* 2019

CemeteryRussellville CemeteryLocationHadley, MALot #9BNameComins, Julia E.Date of DeathJune 11, 1849

Date of DeathJune 11, 1849MaterialmarbleMarker Typetablet w/base

Priority

#### Stone Condition

Ambient dirt and biological growth, fallen, missing base

## Recommendations

Clean and treat biological growth, locate base or create concrete base, reset plumb in base with lime mortar



CemeteryRussellville CemeteryLocationHadley, MALot #9BNameComins, SarahDate of DeathAug. 26, 1853MaterialmarbleMarker Typetablet w/basePriority1

#### **Stone Condition**

Ambient dirt and biological growth, leaning, out of base

## Recommendations

Clean and treat biological growth, reset base plumb, reset in base with lime mortar



Russellville Cemetery Hadley, MA Cemetery Location

14D

Eaton, Edwin M. May 6, 1889 marble Date of Death

Name Lot #

die w/base 2

Marker Type

Priority

Material

#### Stone Condition

leaning, loose on base, missing mortar Ambient dirt and biological growth,

### Recommendations

Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar



Russellville Cemetery Hadley, MA 14D Cemetery Location

Eaton, Julia E.

Name Lot #

marble 1889 Date of Death

Material

die w/base Marker Type Priority

#### **Stone Condition**

Ambient dirt and biological growth, leaning, missing mortar

## Recommendations

Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar



Russellville Cemetery Cemetery Location

Hadley, MA

14D

Date of Death

Name Lot #

Material

Priority

Eaton, Tryphena

die w/base marble Marker Type

Stone Condition

Ambient dirt and biological growth,

fallen, missing mortar

## Recommendations

Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar





\*Conservation Form\* TLC\* 2019

Russellville Cemetery Hadley, MA Cemetery

Location Lot # Elvira

Name

Date of Death Material

marble die w/base 3 Marker Type

Priority

#### **Stone Condition**

Ambient dirt and biological growth, broken base, loose on base

## Recommendations

Clean and treat biological growth, reset base plumb, reset die with lime mortar, fill cracks with restoration mortar



\*Conservation Form\* TLC\* 2019

Russellville Cemetery Hadley, MA Cemetery Location

Fannie M.

Name Lot#

Date of Death Material

marble die w/base 3 Marker Type Priority

Stone Condition

Ambient dirt and biological growth, leaning, concrete

Recommendations

remove concrete, reset base plumb, reset Clean and treat biological growth, die with lime mortar





Russellville Cemetery Hadley, MA Cemetery Location

Father

Name Lot #

Date of Death

marble die w/base 3 Marker Type Material

Priority

#### Stone Condition

loose on base, broken base, missing Ambient dirt and biological growth, mortar

## Recommendations

Clean and treat biological growth, reset base plumb, reset die with lime mortar, fill cracks with restoration mortar



Russellville Cemetery Hadley, MA 6E Father #2 Cemetery Location Name Lot #

Date of Death

die w/base marble Marker Type Priority Material

#### Stone Condition

Ambient dirt and biological growth, leaning, concrete

### Recommendations

Clean and treat biological growth, reset plumb, repoint with lime mortar



CemeteryRussellville CemeteryLocationHadley, MALot #2BNameField, ClaraDate of DeathNov. 28, 1864MaterialmarbleMarker Typetablet w/basePriority2

#### Stone Condition

Ambient dirt and biological growth, leaning, sunken

### Recommendations

Clean and treat biological growth, reset plumb at correct height



\*Conservation Form\* TLC\* 2019

Russellville Cemetery Hadley, MA Cemetery Location Lot #

Name

Field, Mary Lucy

Date of Death

marble tablet Marker Type Material Priority

Stone Condition

Ambient dirt and biological growth, leaning, broken below grade

Recommendations

Clean and treat biological growth, locate plumb in base with lime mortar, reattach fragment, create concrete base, reset fragment



Russellville Cemetery Hadley, MA Cemetery Location Lot #

Field, Phineas Dec. 25, 1877

Name

granite obelisk Date of Death Marker Type Material

Priority

#### **Stone Condition**

Ambient dirt and biological growth, leaning, sunken

## Recommendations

Clean and treat biological growth, reset foundation stone plumb, reset elements with setting compound



CemeteryRussellville CemeteryLocationHadley, MALot #4ANameG., H.J.Date of DeathmarbleMaterialmarbleMarker TypetabletPriority2

#### Stone Condition

Ambient dirt and biological growth, tilted, leaning

## Recommendations

Clean and treat biological growth, reset plumb at correct height



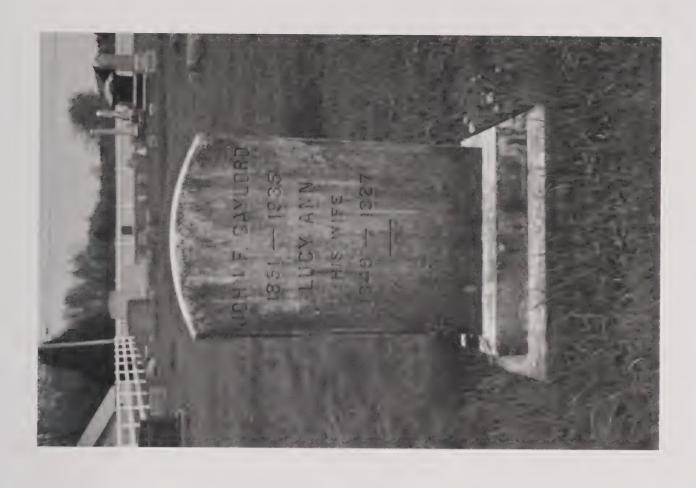
Russellville Cemetery Hadley, MA 13F Gaylord, John F. 1935 die w/base marble Date of Death Marker Type Cemetery Material Location Priority Name Lot #

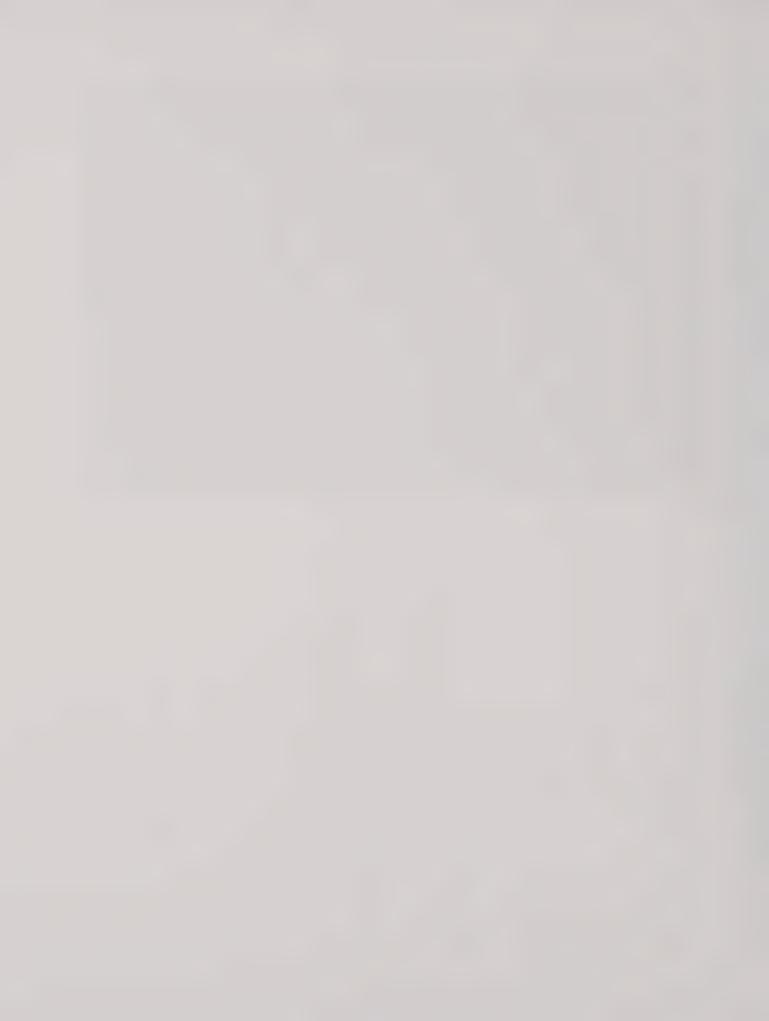
#### Stone Condition

Ambient dirt and biological growth, leaning, sunken, loose on base

## Recommendations

Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar





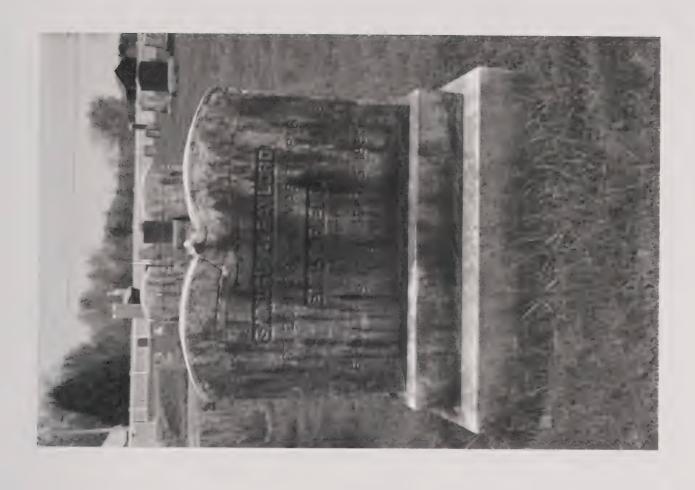
CemeteryRussellville CemeteryLocationHadley, MALot #13ENameGaylord, Samuel and Emily FieldDate of DeathMarch 7, 1918MaterialmarbleMarker Typedie w/basePriority2

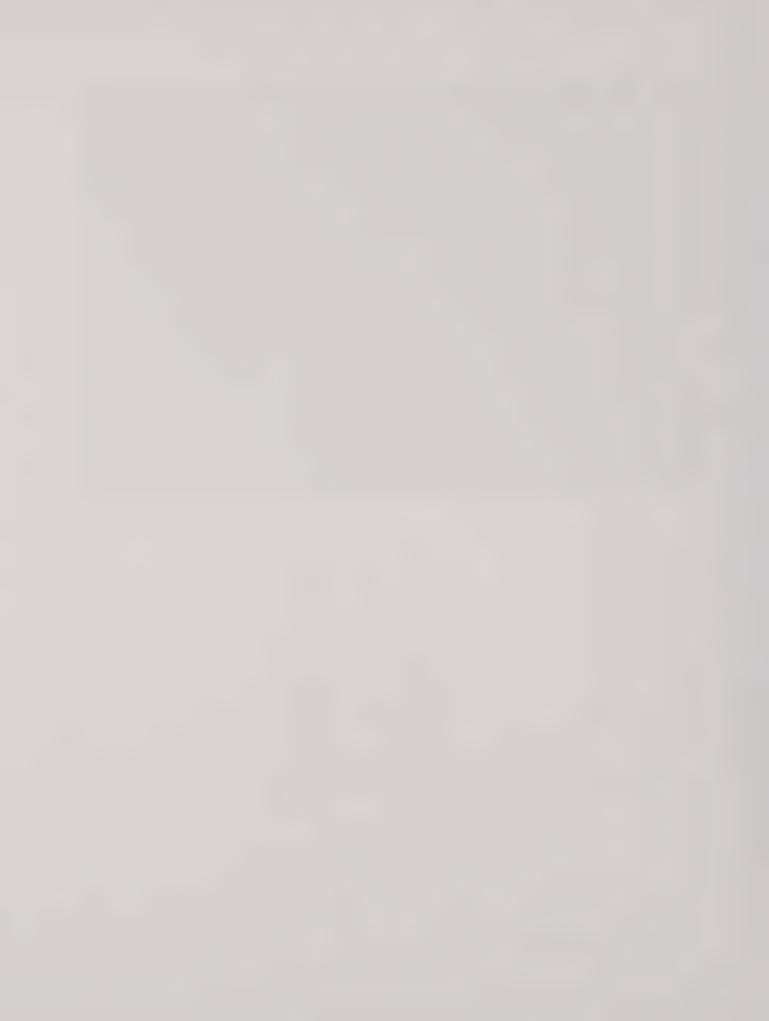
#### Stone Condition

Ambient dirt and biological growth, leaning, surface cracks, missing material, mower damage

## Recommendations

Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar, fill cracks with restoration mortar





CemeteryRussellville CemeteryLocationHadley, MALot #6ENameGeorge H.Date of DeathmarbleMaterialmarbleMarker Typedie w/basePriority3

#### Stone Condition

Ambient dirt and biological growth, leaning, concrete

## Recommendations

Clean and treat biological growth, remove concrete, reset plumb, repoint with lime mortar



Russellville Cemetery Hadley, MA Graves, Emery Cemetery Location Name Lot #

Date of Death

marble die w/base Marker Type

Material

Priority

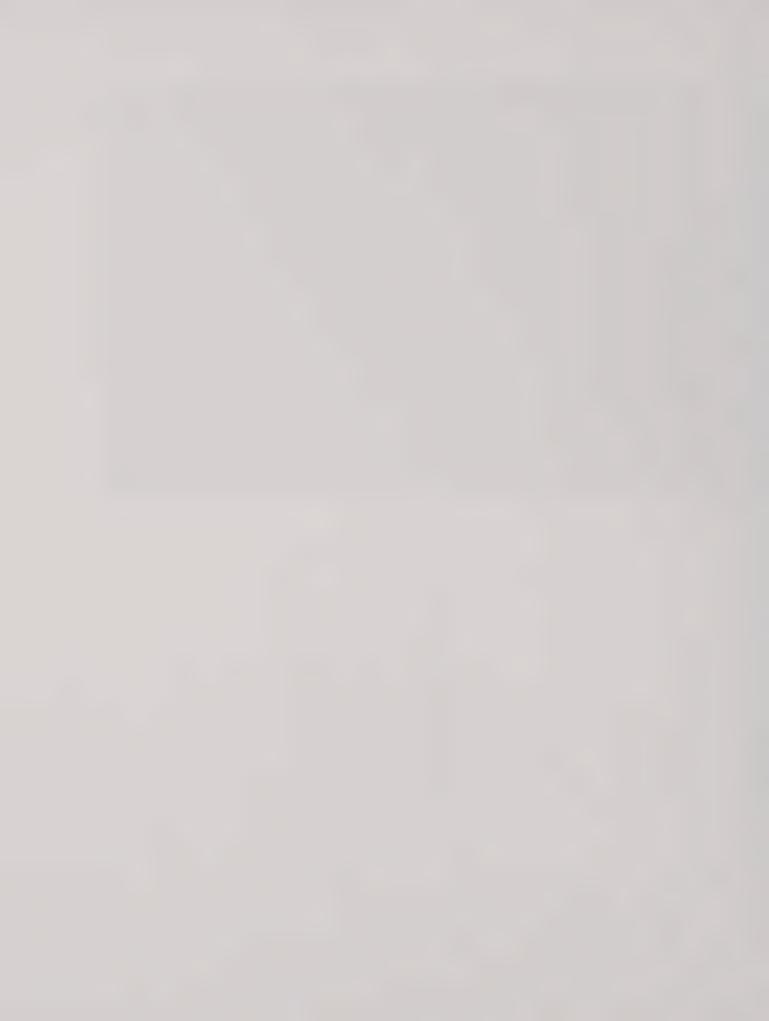
#### Stone Condition

Ambient dirt and biological growth, leaning, broken base, concrete

## Recommendations

fragments, reset in base with lime mortar Clean and treat biological growth, remove concrete, reattach base





Russellville Cemetery Hadley, MA Graves, Susan L. Cemetery Location Name Lot#

Sept. 18, 1875 marble tablet w/base 2 Material Marker Type Date of Death

Priority

Stone Condition

Ambient dirt and biological growth, leaning, sunken

Recommendations



Russellville Cemetery Hadley, MA 3A Cemetery Location Lot #

Grover, Charles L. June 25, 1883 Name

tablet w/base marble Date of Death Marker Type Material

Priority

#### Stone Condition

Ambient dirt and biological growth, leaning, sunken

## Recommendations



Cemetery
Cometery
Location
Lot #
Name
Name
Date of Death
Material
Marker Type
Indicate tablet w/base
Machine tablet w/base
Indicate tablet w/base

#### Stone Condition

Ambient dirt and biological growth, out of base, concrete, broken, old repairs

### Recommendations

Clean and treat biological growth, remove concrete, reset base plumb, reset tablet in base with lime mortar, fill cracks with restoration mortar



CemeteryRussellville CemeteryLocationHadley, MALot #3ANameGrover, JosiahDate of DeathSept. 30, 1853MaterialmarbleMarker Typetablet w/basePriority1

#### Stone Condition

Ambient dirt and biological growth, sunken, leaning, tilted

## Recommendations



CemeteryRussellville CemeteryLocationHadley, MALot #3ANameGrover, Mary S.Date of DeathSept. 18, 1883MaterialmarbleMaterialtablet w/basePriority1

#### Stone Condition

Ambient dirt and biological growth, sunken, leaning

## Recommendations



Russellville Cemetery Hadley, MA Cemetery Location Lot #

Hitchcock, Zeruah Date of Death

Aug. 23, 1856 marble

Material

Name

tablet w/base Marker Type

Priority

#### Stone Condition

Ambient dirt and biological growth, leaning, sunken, mower damage

#### Recommendations



Russellville Cemetery Hadley, MA Hubbard marble tablet 12D Date of Death Cemetery Location Material Name Fot #

Marker Type

Priority

**Stone Condition** 

Ambient dirt and biological growth, leaning, sunken, mower damage

## Recommendations



Russellville Cemetery Hadley, MA 5C Hubbard, Achsah March 27, 1847 marble tablet Date of Death Marker Type Cemetery Material Location Priority Name Lot#

Stone Condition

Ambient dirt and biological growth,

leaning, tilted

## Recommendations



CemeteryRussellville CemeteryLocationHadley, MALot #5CNameHubbard, ElishaDate of DeathOct. 8, 1826MaterialmarbleMarker Typetablet w/basePriority2

#### Stone Condition

Ambient dirt and biological growth, tilted, sunken

## Recommendations



Russellville Cemetery Hadley, MA 5C Cemetery Location

Hubbard, Keziah L. Name Lot #

April 19, 1872 marble Date of Death Material

die w/base Marker Type

Priority

#### Stone Condition

leaning, loose on base, broken plinth Ambient dirt and biological growth,

## Recommendations

Clean and treat biological growth, reset foundation stone plumb, reattach plinth fragments, reset die with lime mortar





Russellville Cemetery Hadley, MA Cemetery Location

Hubbard, Martha

Name Lot#

Date of Death Material

marble die w/base 2 Marker Type Priority

#### **Stone Condition**

Ambient dirt and biological growth, leaning, sunken, broken base

## Recommendations

reattach base fragments, reset base plumb, reset die with lime mortar Clean and treat biological growth,



Russellville Cemetery Hadley, MA 5C Cemetery Location Lot#

Hubbard, Minnie K.

Nov. 30, 1892 Date of Death

Material

Name

marble die w/base Marker Type

Priority

#### Stone Condition

Ambient dirt and biological growth, tilted, sunken, pins, cracks

## Recommendations

remove pins, reset foundation stone plumb, reset die with lime mortar, fill Clean and treat biological growth, cracks



Russellville Cemetery Hadley, MA Cemetery Location

Hubbard, Moses

Name Lot #

Date of Death

Aug. 3, 1875 marble die w/base

Marker Type

Priority

Material

#### **Stone Condition**

Ambient dirt and biological growth, leaning, sunken, loose on base

## Recommendations

Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar



Russellville Cemetery Hadley, MA Cemetery Location

Name Lot #

James Date of Death

marble die w/base 3 Marker Type Material Priority

#### Stone Condition

Ambient dirt and biological growth, concrete, cracks in base

## Recommendations

Clean and treat biological growth, reset plumb, remove concrete, repoint with lime mortar



Russellville Cemetery Hadley, MA 3E Cemetery Location Lot #

Kendall, Ora Russell May 3, 1828

Name

Date of Death

marble die w/base 2 Marker Type Material Priority

#### **Stone Condition**

Ambient dirt and biological growth, leaning, sunken, tilted

### Recommendations

Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar



Russellville Cemetery Hadley, MA Cemetery

Location

L., I.E.

Lot #

marble Date of Death Material Name

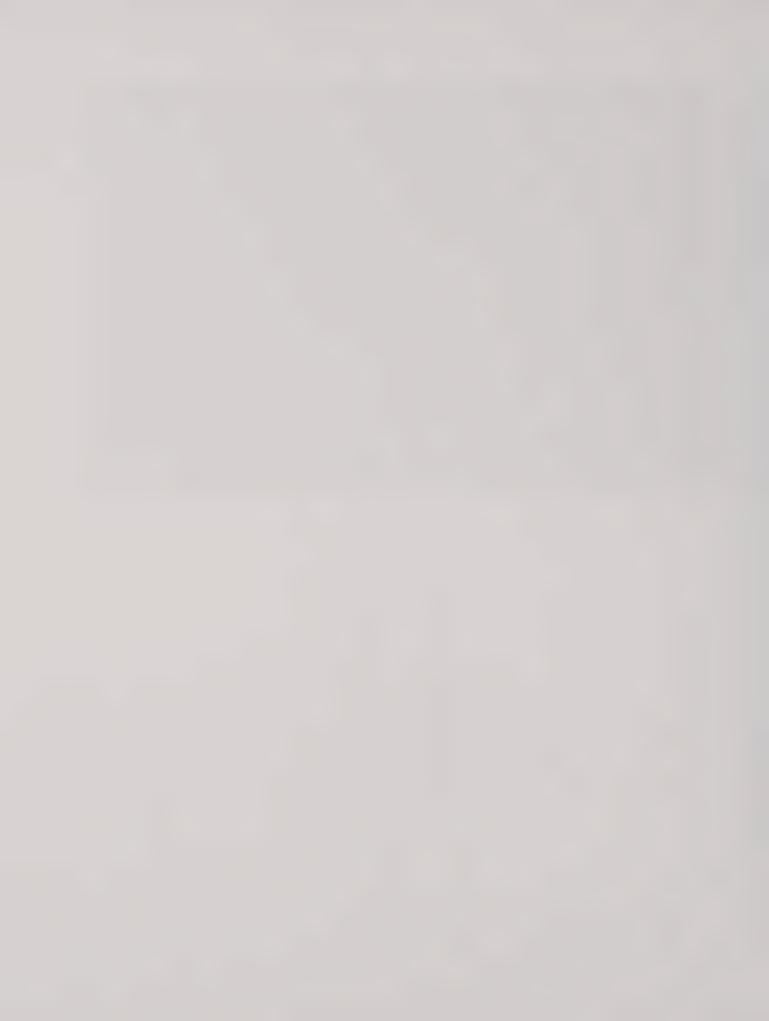
footstone Marker Type Priority

**Stone Condition** 

Ambient dirt and biological growth, leaning, mower damage

Recommendations





Russellville Cemetery Hadley, MA Cemetery

Location Lot #

Name

L., M.E.

Date of Death

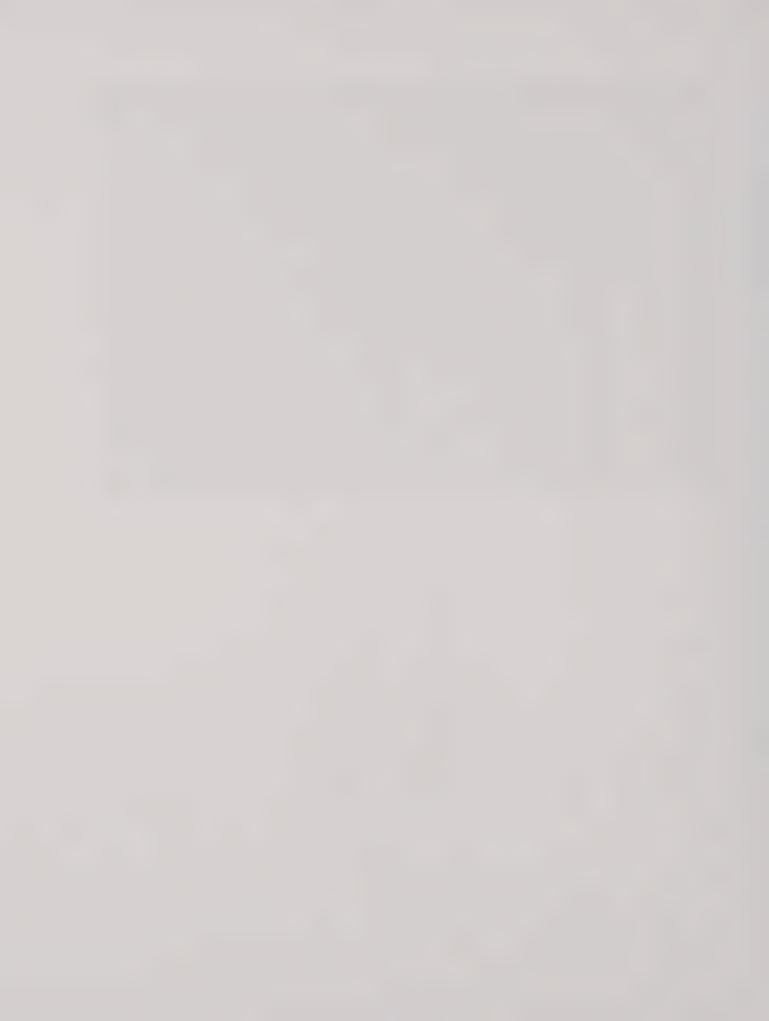
marble footstone Marker Type Material Priority

Stone Condition

Ambient dirt and biological growth, leaning, mower damage, reverse direction

Recommendations





Russellville Cemetery Hadley, MA 5E Cemetery Location Lot#

Lyman

Name

Date of Death Material

marble obelisk Marker Type Priority

#### Stone Condition

leaning, set on rubble, missing mortar Ambient dirt and biological growth,

### Recommendations

Clean and treat biological growth, reset foundation stone plumb, reset elements with lime mortar



Russellville Cemetery Hadley, MA 5E Cemetery Location

Lyman, Marcia

Date of Death

Name Lot #

marble tablet Marker Type

Material

Priority

**Stone Condition** 

Ambient dirt and biological growth,

leaning

Recommendations



Russellville Cemetery Hadley, MA 6C Cemetery Location

Mack, Benjamin

Name Lot #

April 7, 1905 marble Date of Death

tablet w/base

Marker Type

Material

Priority

#### Stone Condition

Ambient dirt and biological growth, loose, leaning, sunken

## Recommendations

base plumb, reset tablet with lime mortar Clean and treat biological growth, reset



CemeteryRussellville CemeteryLocationHadley, MALot #7ANameMahogany, CordeliaDate of DeathAug. 3, 1865MaterialmarbleMarker Typetablet w/base

#### **Stone Condition**

Priority

Ambient dirt and biological growth, tilted, leaning

#### Recommendations



Russellville Cemetery Hadley, MA 7A Cemetery Location Lot#

Mahogany, John Aug. 3, 1885 marble Date of Death

Name

tablet w/base

Marker Type Material

Priority

#### Stone Condition

Ambient dirt and biological growth, leaning, sunken

Recommendations



Russellville Cemetery Hadley, MA Cemetery Location

Mahogany, Lucia Oct. 12, 1839 Date of Death Material

Name Lot#

marble tablet 3 Marker Type

Priority

#### Stone Condition

Ambient dirt and biological growth, leaning, sunken

### Recommendations



Russellville Cemetery Hadley, MA 10C Cemetery Location

McGuire, S.

Lot # Name Date of Death

marble footstone 3 Marker Type

Material

Priority

**Stone Condition** 

Ambient dirt and biological growth, leaning, tilted, mower damage

Recommendations



Russellville Cemetery Hadley, MA 10C Cemetery

Location

Name Lot#

McGuire, William May 11, 1834 Date of Death

die w/base marble Marker Type

Material

Priority

**Stone Condition** 

Ambient dirt and biological growth, leaning, sunken

Recommendations

Clean and treat biological growth, reset foundation stone plumb, reset die with lime mortar



Russellville Cemetery Hadley, MA Cemetery Location Name Lot#

Montague, Arthur Date of Death

Marker Type Material Priority

marble tablet

**Stone Condition** 

Ambient dirt and biological growth, leaning, tilted

Recommendations



Russellville Cemetery Hadley, MA Cemetery Location Lot#

Montague, Brainard and Arthur May 4, 1862 Date of Death

Name

marble

tablet w/base

Marker Type

Material

Priority

#### Stone Condition

Ambient dirt and biological growth, leaning, sunken

#### Recommendations

Clean and treat biological growth, reset plumb at correct height, repoint with lime mortar



Russellville Cemetery Hadley, MA Cemetery Location Lot #

Montague, Jane Dec. 23, 1922 Date of Death

Name

tablet w/base marble Marker Type

Material

Priority

#### **Stone Condition**

Ambient dirt and biological growth, leaning, concrete

### Recommendations

Clean and treat biological growth, reset plumb at correct height, repoint with lime mortar



# HISTORIC GRAVESTONE SERVICES

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Russellville Cemetery Hadley, MA 4E Cemetery Location

Name Fot #

Montague, Merrick Nov. 28, 1866 Date of Death

die w/base marble Marker Type

Material

Priority

#### Stone Condition

Ambient dirt and biological growth, leaning, missing mortar

#### Recommendations

Clean and treat biological growth, reset base plumb at correct height, reset die with lime mortar



Russellville Cemetery Hadley, MA 3C Cemetery

Location

Name Lot #

Montague, Persis Sept. 10, 1851 Date of Death

marble

tablet

Marker Type

Priority

Material

#### **Stone Condition**

Ambient dirt and biological growth,

delaminating

### Recommendations



Russellville Cemetery Hadley, MA 4C Cemetery Location Lot #

Montague, Persis #2 Oct. 8, 1845

marble Date of Death

Material

Name

tablet Marker Type

Priority

Stone Condition

Ambient dirt and biological growth,

leaning

Recommendations



Russellville Cemetery Hadley, MA 3C Montague, William marble tablet w/base June 21 Date of Death Cemetery Material Location Name Lot #

Marker Type

Priority

Stone Condition

Ambient dirt and biological growth, leaning, tilted, sunken

Recommendations



CemeteryRussellville CemeteryLocationHadley, MALot #3CNameMontague, Wm.Date of DeathAug. 4, 1839MaterialmarbleMarker TypetabletPriority1

#### **Stone Condition**

Ambient dirt and biological growth, leaning, tilted

### Recommendations

Clean and treat biological growth Clean and treat biological growth, reset plumb at correct height



Russellville Cemetery Hadley, MA Cemetery Location Name Lot #

Mother

marble die w/base Date of Death Material

Marker Type Priority

#### Stone Condition

Ambient dirt and biological growth, missing mortar, cracks in base

### Recommendations



Russellville Cemetery Hadley, MA 6E Cemetery Location Name Lot #

Mother #2

marble die w/base 3 Material Marker Type Date of Death

Priority

**Stone Condition** 

Ambient dirt and biological growth, leaning, concrete

Recommendations





Russellville Cemetery Hadley, MA 4D Cemetery Location

Newman, Esther

Name Lot#

marble tablet Date of Death Marker Type Material

Priority

Stone Condition

Ambient dirt and biological growth, leaning

Recommendations

Clean and treat biological growth, reset plumb at correct height



Comotory	Duggellyille Comotoury
Cemetery	Nusselly life Celliciely
Location	Hadley, MA
Lot #	5A
Name	Parker, Dema
Date of Death	May 13, 1850
Material	marble
Marker Type	tablet
Priority	2

#### Stone Condition

Ambient dirt and biological growth, leaning, spalling

## Recommendations

Clean and treat biological growth, consolidate material, reset plumb at correct height, fill cracks with restoration mortar



\*Conservation Form\* TLC\* 2019

CemeteryRussellville CemeteryLocationHadley, MALot #9ANameParmenter, LovinaDate of DeathDec. 8, 1871MaterialmarbleMarker Typedie w/basePriority1

#### Stone Condition

Ambient dirt and biological growth, leaning, loose on base, pins, missing mortar

### Recommendations

Clean and treat biological growth, remove pins, reset foundation stone plumb, reset die with lime mortar



Russellville Cemetery Hadley, MA Cemetery Location Lot#

Parmenter, Thaddeus

Jan. 5, 1877

marble Date of Death

Material

Name

Priority

die w/base Marker Type

#### Stone Condition

leaning, loose on base, pins, missing Ambient dirt and biological growth, mortar

### Recommendations



CemeteryRussellville CemeteryLocationHadley, MALot #11ANamePike, SilasDate of DeathJan. 1, 1900MaterialmarbleMarker Typetablet w/basePriority1

#### **Stone Condition**

Ambient dirt and biological growth, leaning, sunken

## Recommendations

Clean and treat biological growth, reset foundation stone plumb, repoint tablet with lime mortar



\*Conservation Form\* TLC\* 2019

Russellville Cemetery Hadley, MA Cemetery Location Lot #

Russell, Adelle Eaton Feb. 20, 1924

Name

marble Date of Death Marker Type Material

die w/base

Priority

#### Stone Condition

Ambient dirt and biological growth, leaning, sunken, loose on base

## Recommendations



Russellville Cemetery Russell, Alpha July 28, 1871 Hadley, MA marble die w/base Date of Death Marker Type Cemetery Material Location Priority Name Lot #

#### Stone Condition

Ambient dirt and biological growth, leaning, tilted, sunken, loose, pins, missing mortar

## Recommendations

remove pins, reset base plumb, reset die Clean and treat biological growth, with lime mortar





Russellville Cemetery Hadley, MA 8B Russell, Anna Date of Death Cemetery Location Name Lot #

tablet w/base marble Marker Type Priority Material

#### **Stone Condition**

Ambient dirt and biological growth, leaning, tilted

## Recommendations



\*Conservation Form\* TLC\* 2019

Russellville Cemetery Hadley, MA Cemetery Location Lot#

Russell, C.

Date of Death Name

marble die w/base Marker Type Priority

Material

#### Stone Condition

Ambient dirt and biological growth, leaning, concrete

## Recommendations

remove concrete, reset base plumb, reset Clean and treat biological growth, die with lime mortar



\*Conservation Form\* TLC\* 2019

Russellville Cemetery Russell, Calvin Hadley, MA Cemetery Location Name Lot#

Date of Death Material

marble die w/base Marker Type Priority

#### **Stone Condition**

Ambient dirt and biological growth, sunken, loose

## Recommendations



\*Conservation Form\* TLC\* 2019

Russellville Cemetery Russell, Calvin April 4, 1883 Hadley, MA Date of Death Cemetery Location Name Lot #

granite obelisk

Material

Marker Type Priority

#### Stone Condition

Ambient dirt and biological growth, leaning, set on rubble

### Recommendations

remove rubble, reset foundation stone plumb, reset elements with setting Clean and treat biological growth, compound



\*Conservation Form\* TLC\* 2019

CemeteryRussellville CemeteryLocationHadley, MALot #4BNameRussell, CarolineDate of DeathJan. 1, 1833MaterialmarbleMarker TypetabletPriority2

Stone Condition

Ambient dirt and biological growth, tilted, sunken

Recommendations

Clean and treat biological growth, reset plumb at correct height



CemeteryRussellville CemeteryLocationHadley, MALot #7ENameRussell, Charles

Name Russell, Charles Date of Death March 31, 1918

th March 31, 1918 granite die w/base

Material

Marker Type die w. Priority 1

#### Stone Condition

Ambient dirt and biological growth, leaning, missing lead

## Recommendations

Clean and treat biological growth, remove rubble, reset foundation stone plumb, reset elements with setting compound





CemeteryRussellville CemeteryLocationHadley, MALot #6BNameRussell, ChristepherDate of DeathMarch 14, 1831MaterialmarbleMarker Typetablet

#### **Stone Condition**

Priority

Ambient dirt and biological growth, tilted

## Recommendations

Clean and treat biological growth, reset plumb at correct height



Russellville Cemetery Hadley, MA Cemetery Location Lot #

Russell, Cordelia M. July 2, 1893 Date of Death

marble die w/base Marker Type

Material

Name

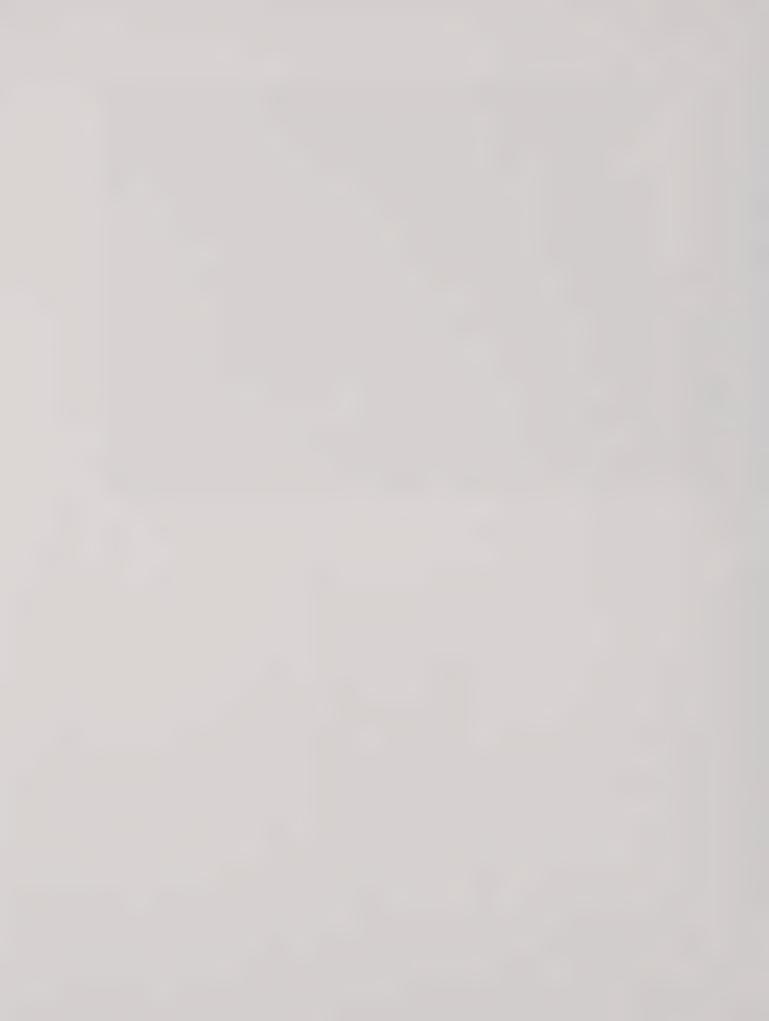
Priority

Stone Condition

leaning, tilted, sunken, moved off base Ambient dirt and biological growth,

Recommendations





\*Conservation Form\* TLC\* 2019

### **Stone Condition**

Ambient dirt and biological growth, leaning, sunken

## Recommendations



Russell, Deacon Daniel Russellville Cemetery Hadley, MA Cemetery Location Name Lot #

Date of Death

marble die w/base Marker Type Material Priority

### Stone Condition

Ambient dirt and biological growth, sunken, loose on base

## Recommendations



Russellville Cemetery Hadley, MA 3B Russell, Ellen Cemetery Location Name Lot #

Date of Death

marble die w/base 2 Material Marker Type Priority

**Stone Condition** 

Ambient dirt and biological growth,

sunken, loose on base

Recommendations





\*Conservation Form\* TLC\* 2019

### Stone Condition

Ambient dirt and biological growth, tilted, sunken, spalling

## Recommendations

Clean and treat biological growth, consolidate material, reset plumb at correct height, fill cracks with restoration



\*Conservation Form\* TLC\* 2019

CemeteryRussellville CemeteryLocationHadley, MALot #6BNameRussell, EmilyDate of DeathJune 29, 1830MaterialmarbleMarker TypetabletPriority2

#### Stone Condition

Ambient dirt and biological growth, leaning

### Recommendations



Russellville Cemetery Hadley, MA Cemetery Location Lot #

Russell, Emmons Sept. 19, 1874 Date of Death

Name

die w/base marble Marker Type

Material

Priority

#### Stone Condition

Ambient dirt and biological growth, tilted, concrete

### Recommendations

remove concrete, reset foundation stone Clean and treat biological growth, plumb, reset die with lime mortar



CemeteryRussellville CemeteryLocationHadley, MALot #5ANameRussell, FloraDate of DeathOct. 16, 1890MaterialmarbleMarker Typetablet w/basePriority3

#### Stone Condition

Ambient dirt and biological growth, leaning, sunken

### Recommendations



CemeteryRussellville CemeteryLocationHadley, MALot #3BNameRussell, HarriettDate of DeathRussell, Harriett

marble die w/base

Marker Type

Priority

Material

Stone Condition

Ambient dirt and biological growth, sunken, loose

Recommendations



CemeteryRussellville CemeteryLocationHadley, MALot #8BNameRussell, HarveyDate of DeathFeb. 21, 1872MaterialmarbleMarker Typetablet w/basePriority3

#### **Stone Condition**

Ambient dirt and biological growth, leaning, sunken

### Recommendations



CemeteryRussellville CemeteryLocationHadley, MALot #3ENameRussell, HazelDate of DeathOct. 13, 1899MaterialmarbleMarker Typedie w/basePriority1

#### **Stone Condition**

Ambient dirt and biological growth, leaning, sunken, loose on base

### Recommendations



CemeteryRussellville CemeteryLocationHadley, MALot #5BNameRussell, HoraceDate of DeathSept. 27, 1868MaterialmarbleMarker Typetablet w/basePriority1

### Stone Condition

Ambient dirt and biological growth, fallen, concrete, broken base

### Recommendations

Clean and treat biological growth, remove concrete, reset base plumb, reset tablet with lime mortar



Cemetery
Constion
Location
Lot #
Name
Name
Date of Death
Material
Marker Type
Priority

Russell, Jane
Feb. 23, 1852
marble
tablet w/base

2

### **Stone Condition**

Ambient dirt and biological growth, leaning, sunken, tilted

### Recommendations



\*Conservation Form\* TLC\* 2019

CemeteryRussellville CemeteryLocationHadley, MALot #8BNameRussell, JoannaDate of DeathNov. 11, 1837MaterialmarbleMarker TypetabletPriority1

Stone Condition

Ambient dirt and biological growth, leaning, tilted

Recommendations



CemeteryRussellville CemeteryLocationHadley, MALot #5BNameRussell, JohnDate of DeathMay 13, 1836Materialmarble

tablet w/base

Marker Type

Priority

### Stone Condition

Ambient dirt and biological growth, leaning, sunken, broken at grade, steel straps

### Recommendations

Clean and treat biological growth, remove steel straps, reattach fragments, reset plumb at correct height





CemeteryRussellville CemeteryLocationHadley, MALot #6BNameRussell, John #2Date of DeathNov. 6, 1883MaterialmarbleMarker Typedie w/basePriority2

### Stone Condition

Ambient dirt and biological growth, leaning, set on rubble, mower damage

### Recommendations



CemeteryRussellville CemeteryLocationHadley, MALot #4BNameRussell, LeviDate of DeathApril 21, 1867MaterialmarbleMarker Typetablet w/basePriority2

### **Stone Condition**

Ambient dirt and biological growth, tilted, sunken, mower damage

### Recommendations



Cemetery Location	Russellville Cemetery Hadley MA
Lot #	5B
Name	Russell, Lovina
Date of Death	June
Material	marble
Marker Type	tablet
Priority	

### **Stone Condition**

Ambient dirt and biological growth, leaning, tilted, mower damage

## Recommendations



CemeteryRussellville CemeteryLocationHadley, MALot #8BNameRussell, Lucia MariaDate of DeathSept. 6, 1833MaterialmarbleMarker TypetabletPriority1

### Stone Condition

Ambient dirt and biological growth, leaning, tilted, missing material

## Recommendations

Clean and treat biological growth, reset plumb at correct height, fill missing material with restoration mortar



# HISTORIC GRAVESTONE SERVICES

\*Conservation Form\* TLC\* 2019

Russellville Cemetery Hadley, MA Cemetery Location Name Lot #

Russell, Lucy

die w/base marble Date of Death Marker Type Material

Priority

#### Stone Condition

Ambient dirt and biological growth, leaning, loose on base

## Recommendations

Clean and treat biological growth, reset base plumb, reset die with lime mortar



CemeteryRussellville CemeteryLocationHadley, MALot #8BNameRussell, Lucy P.Date of DeathDec. 31, 1896MaterialmarbleMarker Typetablet w/basePriority3

#### Stone Condition

Ambient dirt and biological growth, leaning, sunken

## Recommendations



Russellville Cemetery Hadley, MA 5A Russell, Martha Date of Death Material Cemetery Location Name Lot #

marble tablet w/base

Marker Type Priority

#### **Stone Condition**

Ambient dirt and biological growth, leaning, sunken

## Recommendations

Clean and treat biological growth, reset base plumb, repoint tablet with lime mortar



Russellville Cemetery Hadley, MA Cemetery Location Lot #

5B

Russell, Martha J.

Name

Date of Death

tablet w/base marble Marker Type Material

Priority

#### **Stone Condition**

Ambient dirt and biological growth,

leaning, sunken

## Recommendations

Clean and treat biological growth, reset plumb, repoint with lime mortar



Russellville Cemetery Hadley, MA 5B Russell, Miram Oct. 3, 1830 marble tablet w/base Marker Type Priority Date of Death Cemetery Material Location Name Lot #

#### **Stone Condition**

Ambient dirt and biological growth, tilted, sunken

## Recommendations



Russellville Cemetery Hadley, MA Cemetery Location Lot#

Russell, Myra L. June 21, 1878 Date of Death Name

marble die w/base Material Marker Type

Priority

#### **Stone Condition**

loose on base, concrete, surface cracks Ambient dirt and biological growth,

## Recommendations

remove concrete, reset base plumb, reset die with lime mortar, fill cracks with Clean and treat biological growth, restoration mortar



CemeteryRussellville CemeteryLocationHadley, MALot #3BNameRussell, Sally

Material marble
Marker Type die w/base
Priority 2

Stone Condition

Ambient dirt and biological growth, leaning, sunken

Recommendations

Clean and treat biological growth, reset base plumb, reset die with lime mortar





Russellville Cemetery Hadley, MA Cemetery Location Lot#

Russell, Salome Feb. 2, 1884

Name

Date of Death Material

marble tablet Marker Type Priority

#### **Stone Condition**

Ambient dirt and biological growth, tilted

## Recommendations



Russellville Cemetery Russell, Sarah June 14, 1843 Hadley, MA Date of Death Cemetery Location Name Lot#

marble tablet Material

Marker Type Priority

#### Stone Condition

Ambient dirt and biological growth,

## Recommendations



# HISTORIC GRAVESTONE SERVICES

\*Conservation Form\* TLC\* 2019

	C 11. 11
Cemetery	Kussellville Cemetery
Location	Hadley, MA
Lot #	6B
Name	Russell, Sarah M.
Date of Death	April 14, 1842
Material	marble
Marker Type	tablet
Priority	2

#### **Stone Condition**

Ambient dirt and biological growth, leaning, spalling

## Recommendations





Russellville Cemetery Hadley, MA 7D Russell, Unknown Cemetery Location Name Lot #

Date of Death

Material

Marker Type

Priority

marble tablet w/base

Stone Condition

leaning, tilted, sunken, surface cracks Ambient dirt and biological growth,

## Recommendations

plumb at correct height, fill cracks with Clean and treat biological growth, reset restoration mortar



Russellville Cemetery Hadley, MA Cemetery Location Lot#

Shattuck Feb. 20, 1872

Date of Death

Material

Name

Priority

marble obelisk Marker Type

**Stone Condition** 

Ambient dirt and biological growth, leaning, concrete, missing mortar, surface cracks

Recommendations

Clean and treat biological growth, reset foundation stone plumb, reset elements with lime mortar, fill cracks





Russellville Cemetery Hadley, MA 2D Spear, infant Cemetery Location Name Lot#

marble tablet Date of Death Marker Type Material

Priority

Stone Condition

leaning, tilted, sunken, surface cracks Ambient dirt and biological growth,

Recommendations

Clean and treat biological growth, reset plumb at correct height, fill cracks with restoration mortar





Russellville Cemetery Hadley, MA 4D Thayer, Medad slate tablet 3 Date of Death Cemetery Material Location Name Lot#

#### Stone Condition

Marker Type Priority

Ambient dirt and biological growth, leaning, sunken

## Recommendations





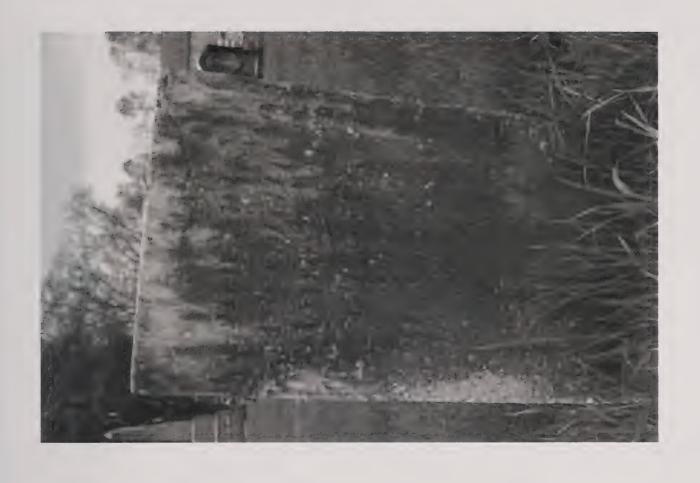
Russellville Cemetery Hadley, MA 4D Thayer, Medad #2 Date of Death Cemetery Location Name Lot#

marble tablet Marker Type Priority Material

#### Stone Condition

Ambient dirt and biological growth, tilted, surface cracks, missing material

## Recommendations





Russellville Cemetery Hadley, MA Cemetery Location Lot#

Train, Horrace

Name

granite obelisk 1853 Date of Death Material

Marker Type

Priority

#### Stone Condition

leaning, missing mortar, set on rubble Ambient dirt and biological growth,

## Recommendations

remove rubble, reset base plumb, reset Clean and treat biological growth, elements with setting compound





Russellville Cemetery Hadley, MA Unknown #1 Cemetery Location Name Lot#

marble footstone Date of Death Material Marker Type

Priority

Stone Condition

Ambient dirt and biological growth, leaning, location?

Recommendations



Russellville Cemetery Hadley, MA 5E W., L.M. Cemetery Location Name Lot #

marble footstone Marker Type Priority Date of Death Material

Stone Condition

Ambient dirt and biological growth, leaning, tilted, mower damage

Recommendations





Russellville Cemetery Hadley, MA 10D Cemetery Location

Waite, children of Chas.

Lot #

Date of Death Name

marble tablet Material

Marker Type Priority

Stone Condition

Ambient dirt and biological growth, leaning, sunken, mower damage

Recommendations

Clean and treat biological growth, reset plumb at correct height





Russellville Cemetery Hadley, MA 10D Cemetery Location

Name

Lot#

Waite, children of Chas. #2 Date of Death

marble tablet Marker Type Priority Material

**Stone Condition** 

Ambient dirt and biological growth, leaning, sunken, mower damage

Recommendations

Clean and treat biological growth, reset plumb at correct height



Russellville Cemetery Hadley, MA 7C Cemetery Location Lot #

Whitney, Hamilton A.

Sept. 3, 1884

Date of Death

Material

Name

marble die w/base Marker Type

Priority

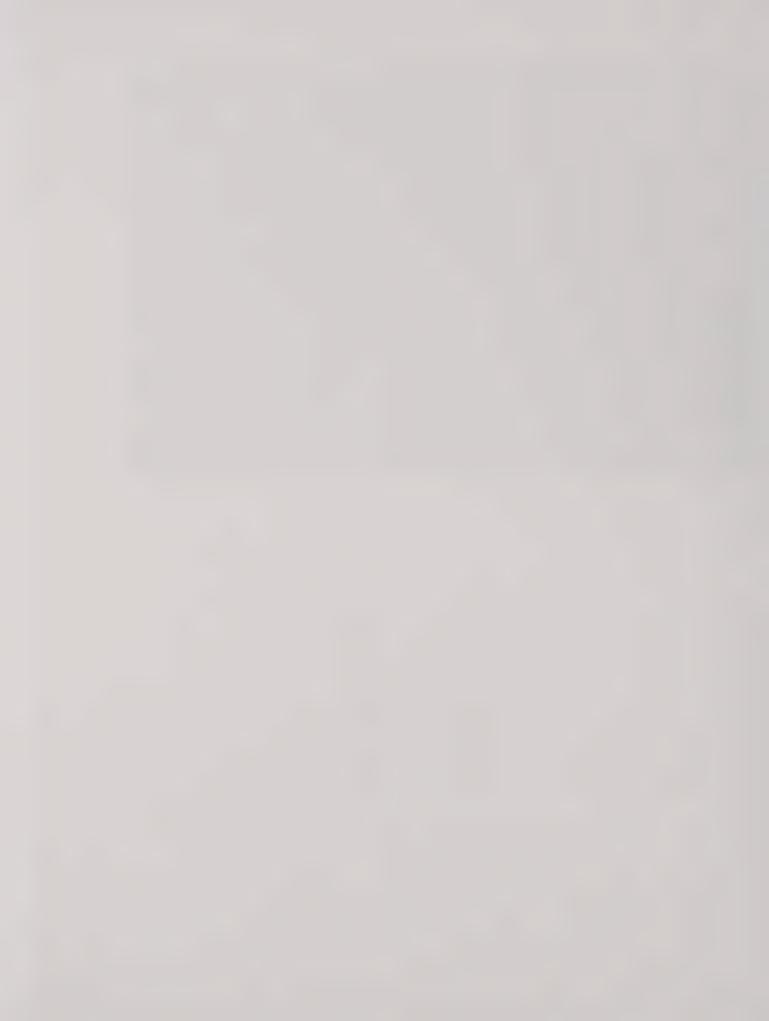
### Stone Condition

Ambient dirt and biological growth, tilted, sunken

## Recommendations

Clean and treat biological growth, reset base plumb, reset die with lime mortar





CemeteryRussellville CemeteryLocationHadley, MALot #12ENameWiley, AdelineDate of DeathAug. 7, 1881MaterialmarbleMarker Typedie w/basePriority1

### Stone Condition

Ambient dirt and biological growth, leaning, loose on base, broken plinth

### Recommendations

Clean and treat biological growth, reattach plinth fragments, reset base plumb, reset die with lime mortar



CemeteryRussellville CemeteryLocationHadley, MALot #12ENameWiley, Carrie E.Date of DeathMay 11, 1889MaterialmarbleMarker Typedie w/basePriority3

### **Stone Condition**

Ambient dirt and biological growth, leaning, mower damage

## Recommendations

Clean and treat biological growth, reset base plumb, reset die with lime mortar



Russellville Cemetery Hadley, MA 12E Wiley, Dexter May 21, 1901 Date of Death Cemetery Location Name Lot#

marble die w/base

Marker Type

Material

Priority

Stone Condition

Ambient dirt and biological growth, leaning, tilted, mower damage

Recommendations

Clean and treat biological growth, reset base plumb, reset die with lime mortar





Russellville Cemetery Hadley, MA Cemetery Location Lot #

Wiley, Ebenezer March 29, 1888

Name

Date of Death

Material

marble die w/base Marker Type

Priority

### Stone Condition

Ambient dirt and biological growth, leaning, loose on base

### Recommendations

Clean and treat biological growth, reset base plumb, reset die with lime mortar





CemeteryRussellville CemeteryLocationHadley, MALot #12ENameWiley, ElsoDate of DeathJan. 1918MaterialmarbleMarker TypetabletPriority1

Stone Condition

Ambient dirt and biological growth, leaning, concrete

Recommendations

Clean and treat biological growth, reset plumb at correct height



### **CONSERVATION METHODOLOGY**

### TREATMENT PLAN.

Examine each stone on the list prior to beginning work. Descriptions of conditions as well as recommended treatments included with the list are for the purpose of identifying the markers that will be treated and for giving a general description of the conditions and recommended treatments. The short description is not intended to define all of the treatments or treatment steps that may be required. It is the responsibility of the conservator to examine each stone to determine its proper treatment and to submit a conservation plan for approval prior to proceeding with any work.

Conservator is to submit for review a detailed treatment plan for the grave markers and tombs scheduled for treatment. Treatment plan is to include any changes in scope, materials and/or methodologies from what has been specified. No work may commence on the markers until the treatment plan has been reviewed and approved. Treatment plan must include detailed descriptions of materials and methods to be used in each treatment as well as manufacturer's data on each product. Material Safety Data Sheets for each product must be submitted separately. Treatment plan must include sequence of treatments.

### **Documentation**

Document the condition of each grave marker or footstone scheduled to receive conservation treatments with a survey sheet and digital photographs prior to proceeding with any work. Document the locations of all treatments to stone on survey sheets. Photograph the stone during and after treatment with digital photos. Upon completion of the project, provide the town/city with three (3) copies of the following: copies of all survey sheets with proposed treatments, copies of final treatment reports plus any field reports, and project correspondences. Include material safety data sheets and manufacturer's cut sheets for all products. In addition, provide the town/city with electronic copies of all forms, reports and photographs of grave markers; before, during and after treatment.

### Cleaning

Clean stones to remove biological growths, general soiling and dirt as required to complete the specified repairs to the stones. If the stone can be successfully treated without cleaning then cleaning is not required.

If cleaning is necessary the stone surfaces should be rinsed with a generous amount of water and brushed with a natural bristle brush. Repeat as necessary. If a stone has biological growth, it can be treated with an anti-biological solution. D2 Biological Solution (LimeWorks Products) is the recommended product for this application. D2 is a water soluble, non toxic, anti-biological solution which does not react with the stone or leave soluble salts.



### Removal of markers from the ground

Carefully dig on both sides of the marker without damaging or scraping the marker. If lifting equipment is required to lift the marker out of the hole, carefully place straps around marker so that the straps will not abrade or scratch the stone. For soft or friable stones such as deteriorated marble, stone should be consolidated before lifting straps are used.

Store markers or component pieces of markers in a safe location. Cover markers when necessary to prevent damage or soiling.

### Removal of failed repairs

Failed adhesives, mortars and pins require careful removal before proceeding with conservation treatment. Some temporary stabilization may be necessary as poorly attached fragments are disassembled. Stabilize all loose fragments of stone and friable areas of stone with tissue paper or cloth and Paraloid B-72 acrylate bitumen stone adhesive/stabilizer or water soluble adhesives or other means at the discretion of the conservator, prior to proceeding with any other treatments including removal and resetting of stones.

Removal of degraded structural resins may be particularly difficult and time-consuming. Mechanical removal should be done with small hand tools, however, the cutting of pins and fasteners may require power tools. Ferrous metal pins are most often locked in place by corrosion expansion. Their removal is best done by careful drilling with a properly sized coring bit at low speeds and with water. Do not replace pins and fill voids with proper mortar fill material.

### RESETTING

Eighteenth and early nineteenth century New England gravestones are typically stone tablets that were set directly in the ground. By the first half of the 19<sup>th</sup> century many headstones began to be set in bases. Stones were either mortared into slots or pined to the base. In some cases older tablets were cut and reset with a base.

Larger monuments are often made of several elements and can be both large and heavy. Specialized hoisting equipment is often required. Competent operation and structural engineering considerations are required when performing this work.

### Resetting in ground

Tilted stones set directly in the ground can be made plumb by careful excavation of the soil with hand tools, to permit re-setting in the proper position with good drainage. When excavating, all large stones should be removed as ice heaves can cause an underground stone to push on the gravestone. A typical tablet will have approximately 1/3 of its length buried in the ground. If there is not an adequate length of below grade material to support the marker a new cast concrete below grade base will be required. Once the stone is carefully placed into the vertical position and at the proper depth, the stone is made plumb and level, and aligned with adjacent markers. Backfill with a mixture of course sand, pea gravel, and loam, wetted and compacted. Disturbed areas of the ground are re-graded with topsoil and seeded as required.



Some grave markers may be identified as fragments, or grave markers removed from the ground may turn out to be fragments of whole stones. The conservator should search for possible mates for all fragments that are discovered lying on the ground or below grade. It is their responsibility to make every attempt to rejoin separated fragments.

### Resetting on/in existing base

Unsecured stones in existing bases require re-setting. First, the base should be reset level and aligned with adjacent stones. Pins should be removed if present, then the stone can be re-set level and plumb in the existing slot.

Re-set the stone in the slot with a full bed of modified lime (or hydraulic lime) mortar. Historically ratios of 1 part cement, 4 parts lime and 8 parts fine sand have been used with reasonable results. This mix is generally considered to be a soft mortar. Some conservation recommendations have specified ratios as high as 3 parts cement, 2 parts lime and 8 parts sand. The increased cement and reduced lime content has the effect of increasing the strength and adhesion of the mortar. In theory this would tend to make the mortar last longer than the traditional mix. The negative aspect is that the higher cement ratio produces a harder joint which induces a compression stress on the stone as the stone swells with varying weather conditions.

### Resetting into new cast concrete base

There are several situations where a new cast base will be required. Usually tablets which are broken near grade level or have been cut years earlier and set into bases that have failed are typical examples of when a new base is needed. Bases can be set above grade or below depending on the stone, aesthetics or other factors. Bases can be cast on site or pre-cast and set in place on a level bed of gravel and sand.

Cast concrete bases are typically made with a slot that is ½" wider and thicker than the stone and is recessed 3"-4". Depending on the size of the stone the base is usually 8"-12" deep, 8"-12" greater thickness and 6"-8" wider than the stone. Drainage holes in the cast base are required in order to remove moisture from the mortar pocket. This method is fine when resetting stones with a square bottom.



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Some conservation specifications recommend squaring the bottom of the stone by cutting the stone with a saw. This should never be done as the use of power tools on old stones can cause damage to the stone. In addition valuable history including inscriptions and initial stone integrity will be lost. If the bottom of the stone is not square a base with the same dimensions as above should be made but the slot should go completely through the base. This allows the excess stone to extend under the base level if needed and provides for better support. This also allows broken fragments, belonging to the stone, to be either attached to or buried beneath the stone. The stone would then be mortared into the base with a high lime mortar as described above.

### Resetting of two and three part markers

Re-level lowest unit of multi-part markers using gravel and/or shim stones prior to setting additional units on top. Depending on the existing conditions, provide six inches of gravel beneath the lowest unit if the existing is sitting on soil

Set units of two and three piece markers and monuments on full mortar beds. Use wood wedges placed in the joints to control thickness of setting beds. Do not use shims that will remain as part of the setting bed. Maintain existing joint thicknesses. Do not set historic markers in joint compound.

Compress setting mortar to a depth 2.5 times the joint height in order to prepare for the final pointing. Point joints using specified mortars. Use white mortar for white marble and tinted mortars for colored stones such as granite or sandstone. Tint the mortar to match the base color of the stone.

### Extensions to slab markers that are too short to be reset

Stone extensions: Markers that are too short to be reset in the ground without covering the existing lettering and carvings can be extended with natural stone in the same manner that fragments of broken markers are reattached. See paragraph 3.11 Adhesive Repairs (Structural). The new piece of stone must be of the same width and thickness as the original and from the same geological class of stone. i.e. marble with marble and slate with slate. The new piece of stone must be coped out to mate with existing piece of stone without removing any of the historic material that contains carving or lettering.

### STRUCTURAL REATTACHMENTS

Broken stones to be bonded should be carefully cleaned and dry fitted to insure proper fit. The area around the stone should be probed for any missing pieces which may belong to the stone. Traditional method of two part epoxy (Aboweld 55-22, Abatron) is the common way of bonding stones that require structural integrity. Epoxy is very strong, although it also is moisture insensitive. This has the effect of creating a moisture barrier at the repair joint. For marble and slate stones this can cause a small amount of stone degradation over time due to the inability of the moisture to wick away from the area. Field observations have shown that failures usually occur adjacent to the repair joint which has been attributed to the strength of the epoxy being stronger than the marble. Closer observations have shown that the stone at the new break is



usually degraded. Epoxy should be reserved for conditions where high shear forces are acting on the stone. Several factors such as angle of break, thickness of the stone, weight and bonding surface area need to be considered when deciding to use epoxy.

For most bonding applications, a non polymer, cement based restoration mortar (Jahn Restoration Mortars, Cathedral Stone) should be used. The specific bonding method should conform to the manufacturer's specifications for the specific stone and should be performed by a certified Jahn Products Technician. Bonding with restoration mortars is preferable since the mortars are permeable to moisture and allow the stones to breath. Over time the stone integrity is maintained and should last longer than the epoxy. Restoration mortars should be tinted to match the stone color and texture after cleaning. Tinting can be achieved through appropriate pigments (alkali stable oxides) which are available through Cathedral Stone or mason supply.

### Reinforcement

The routine use of pins has been the traditional way of reinforcing broken stones. This method is in debate and controversial. The use of pins should be avoided except in some very extreme situations where it is unavoidable. Generally, the use of pins is to provide extra support to keep two pieces together. If the stone begins to lean and the adhesion joint fails between the stones, then the pins are carrying the full weight of the stone. The pin extends the moment arm which can cause a large blow out on the face of the stone next to the pin. Do not replace pins.

### REPAIR MORTARS/ CRACK FILLERS

### Pre consolidation/stabilization prior to treatments

The goal of pre-consolidation shall be to secure all loose, semi-detached or friable areas against loss during other conservation treatments including pointing and cleaning. Contractor will be held responsible for losses on the stone that take place during conservation treatments therefore the extent of pre-consolidation shall be that which is in the contractor's judgment sufficient to secure against losses. Submittal shall be for materials and methodology not extent of pre-consolidation.

Acrylic Resin B-72 dissolved in a solvent such as acetone approximately 5% solids shall be applied with a brush to areas requiring pre-consolidation. Japanese tissue paper shall be applied to wetted areas. Additional solution of B-72 may be applied over tissue paper. Where conditions permit, water soluble adhesives may be substituted for B-72.

### Removal of prior mortar fills and composite mortar repairs

Pre-consolidation as described above shall precede all raking out of joints, removal of mortar caps and prior composite mortar or adhesive repairs. It is the conservator's responsibility to pre-consolidate all loose and friable areas of stone prior to starting other treatments.

Surface tension and bond of prior repairs may be broken using power tools such as small diamond cutting wheels, Dremmel Tools and small pneumatic chisels. All other removal is to be performed by skilled craftsmen using hand tools. Use of hand held grinders or other power tools shall be only after demonstrated proficiency by each craftsman/conservation technician on selected



control areas. Cutting wheel shall not be brought in proximity with stone surface or edges. Cutting wheels shall be used only to break the bonds to create entry points for hand tools. Every precaution shall be taken not to damage, nick, scar or abrade the stone.

Areas of missing stone can be filled using commercially available restoration mortars (Jahn Restoration Mortars, Cathedral Stone) tinted to match the stone. Tinting can be accomplished in the same way as described above in bonding mortars. Large cracks can also be filled using the same mortars. Mortar repairs should not be performed if there is a risk of freezing temperatures within two weeks after performing work.

### Filling of delaminating stones

De-lamination occurs in many stones typically slate and sandstone. Repair of delaminated stones is designed to reattach the separated layers and prevent water penetration. The first step is to thoroughly clean the interior surfaces of the crack to remove debris. Depending on the nature of the crack, hand tools and compressed are can be used to clean out the area. Interior surfaces should then be wetted with water or a solution of water and isopropanol. For cracks larger than a 1/8" commercially available M40 flowable grout (Cathedral Stone) can also be used. For smaller cracks M32 is better suited due to smaller grain size. Grouts should be tinted to match the stone after cleaning. Flowable grouts should be applied using manufacturers recommendations.

### Mortar fills and mortar caps -General

The goal of mortar fills and caps is to create the maximum water shedding fill, joint or seam for each particular configuration of stone. Surface of fill shall be tooled and slicked to conform to the contours of the edge of the stone in order to achieve maximum water shedding.

Mix mortar to specified proportions and in conformance with the color and texture of approved samples. Apply mortar to stone that has been properly prepared and is free of dirt, soiling and any loose or friable material or surface accretions that may have a detrimental effect on the bond. Wet stone must avoid excess absorption of moisture from mortar.

Apply mortar in consecutive lifts where required to avoid excessive shrinkage. Cure moist mortar for a minimum of seven days or until mortar is properly cured. When mortar has cured, tint the surface of the mortar with approved product.

### Mortar application for fills and mortar caps

First layer must create a uniform depth for later applications and be thoroughly compacted into cavities. Apply mortar to a maximum thickness of 3/8". After voids have been filled to a uniform depth, apply remaining mortar in successive thick layers. Fully compact each layer and allow it to dry to thumbprint hardness before applying next layer. When the final layer is thumbprint hard, tool to match the approved sample. Avoid feather-edging of mortar joint.

If existing stonework has rounded edges from wear, recess slightly the mortar from face of stone surface. Immediately after completion, remove excess mortar by light brushing with a natural bristle brush. Do not leave encrusted matter.

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Keep mortar damp for 48 hours after pointing to permit proper hardening of mortar. Cover masonry temporarily with burlap, which must be moistened periodically. Temporarily cover wall with plastic sheets to prevent evaporation. Continue to moisten for up to seven (7) days, if required due to high temperatures or high winds. Protect mortar from overnight rain. For proprietary mortars; follow manufacturer's directions for applying and curing mortars.

### Cleaning after mortar rills or patching or grouting

The face of all stonework shall be thoroughly cleaned after completion of the pointing and other work liable to soil the stone. The stonework shall be gone over and any mortar splashes or smears shall be carefully removed from the surface with scrapers.

The cleaning shall be done with clean water applied vigorously with natural bristle brushes. After cleaning with brushes the stone shall be thoroughly rinsed with clear water. Proprietary cleaning compounds containing caustic agents, intended for removing mortar smears shall not be used. The goal is to remove all smears before they set so that caustic agents are not required.

### Reattachment of small fragments

Small stone fragments or friable areas are typically reattached with a solution of Acryloid B-72 in solution of acetone. This method is mainly for non structural applications where a zero thickness bonding joint is desired. Care should be taken as the B-72 forms moisture impermeable layers at the joint similar to epoxy. Depending on the geometry of the break it is possible to create a moisture trap which can cause deterioration over time. Clean all excess B-72 from the stone surface with acetone.

### Consolidation of friable stone

Consolidation should be performed before any other treatments are done. Consolidation should be performed using Conservaire OH100 (Prosoco) following manufacturers specifications for proper application. OH100 should be applied a minimum of 6 applications to promote deep penetration. Failure to perform this task can cause a hard skin to form and cause a layer of stone to delaminate. OH100 binds the grains of the stone without filling the voids between the grains. This allows the stone to continue to breath and expel water from the interior of the stone. Any stone that is consolidated should not have further conservation work for 30 days to allow all the solvent to evaporate. Structural bonding applications will be degraded if there is solvent still present at the adhesive joint.

### **MATERIALS**

Comply with referenced standards and other requirements indicated applicable to each type of material required. Reference in the specifications to materials by trade name is to establish a standard of quality. It is not intended to exclude other manufacturers whose materials are, in the judgment of the project manager with the conservator and based on sample panels, equivalent to those named.



### Materials for cleaning and removing soiling prior to repairs

Water, all water should be clean portable water. Detergents or soap, should be Vulpex soap from Talas, 568 Broadway, New York, NY 10012 (212)219-0770 or Orvus WA Paste also available from Talas. Biological growths should be treated with D-2 available from LimeWorks.us (215)536-6706 or Revive from Prosoco.com or approved equal.

### Materials for flushing cracks and fissures prior to adhesive or infill

Clean water or solvents such as Acetone or Ethanol D6 Anhydrous.

### Materials for stabilization of loose fragments prior to removal or other treatments

Paraloid acrylic resin B-72 and Japanese tissue paper or fine cloth such as silk Crepeline applied to the surface of the friable or loose stone. B-72 should be dissolved in solvent such as acetone and the percentage of solids to solvent to be field tested. B-72 is available from Talas, 330 Morgan Ave, Brooklyn, NY 11211 (212) 219-0770 <a href="www.talasonline.com">www.talasonline.com</a> or other conservation supply companies.

### Material for non-structural repairs and laying down stone flakes

Paraloid acrylic resin B-72 (100%) dissolved in solvent such as acetone and the percentage of solids to solvent to be field tested. Tubes of 10% paraloid B-72 in acetone can be obtained from Talas, 330 Morgan Ave, Brooklyn, NY 11211 (212) 219-0770 <a href="https://www.talasonline.com">www.talasonline.com</a> or other conservation supply companies.

### Material for adhesive structural repairs

Exterior grade flowable and paste epoxies that are moisture tolerant and specifically manufactured for the structural repair of stone and masonry. Akemi Akepox 2000, 2010, 2030, 5000, and 5010 available from Akemi North America, Stone Boss Industries, 26-04 Borough Place, Woodside, NY 11377 (718)278-2677 or approved equal.

### Material for mortar fills, rebuilding areas of loss and caps

Composite repair mortars should be non-polymer modified composite repair mortar specifically for slate, sandstone or marble and should be used for fills, rebuilding areas of loss and capping delaminating stones. These can be obtained from Cathederal Stone Products, 8332 Bristol Court, #107, Jessup, Maryland 20794 (800)6840901 and www.limeworks.us (215)536-6706.

For smaller voids use Acryloid B-72 dissolved in solvent. Concentrations will vary depending on the depth and width of the crack or void to be filled. Large voids to be filled with B-72 bulked with an inert material such as fine grain stone material. Exact proportions to be determined by the conservator in the field based on the size of the area to be filled and other requirements such as ability of the mix to flow evenly through the area.



### Replacement stone (for extending broken stones)

- 1. Marble: Vermont Marble available from Vermont Quarries, 88 Church Street, Rutland, Vermont 05701, (802) 775-1065 or approved equal.
- / 2. Slate: New or Salvaged slate to match color and texture of historic material. Portland Munson Slate available from Sheldon Slate Products, 38 Farm Quarry Road, Monson, ME 04464, (207)-997-3615, or approved equal.

### Soil materials

1. Structural Fill: Provide gravel, sandy gravel, or gravelly sand free from organic material; foam, trash, snow, ice, frozen soil and other objectionable materials and well graded within the following limits:

Sieve Size Passing Through 6 inches

No.4

No. 40

No. 200

Percent Finer by Weight

100

30-90

10-50

0-8

2. Crushed Stone: Provide clean, washed crushed stone free of fine materials and graded within the following limits:

Sieve Size Passing Through

6 inches

%inch

12 inch

No.4

No. 40

No. 200

23

Percent Finer by Weight

100

90-100

20-30

0-5

0-5

0-5





